

FIG. 1

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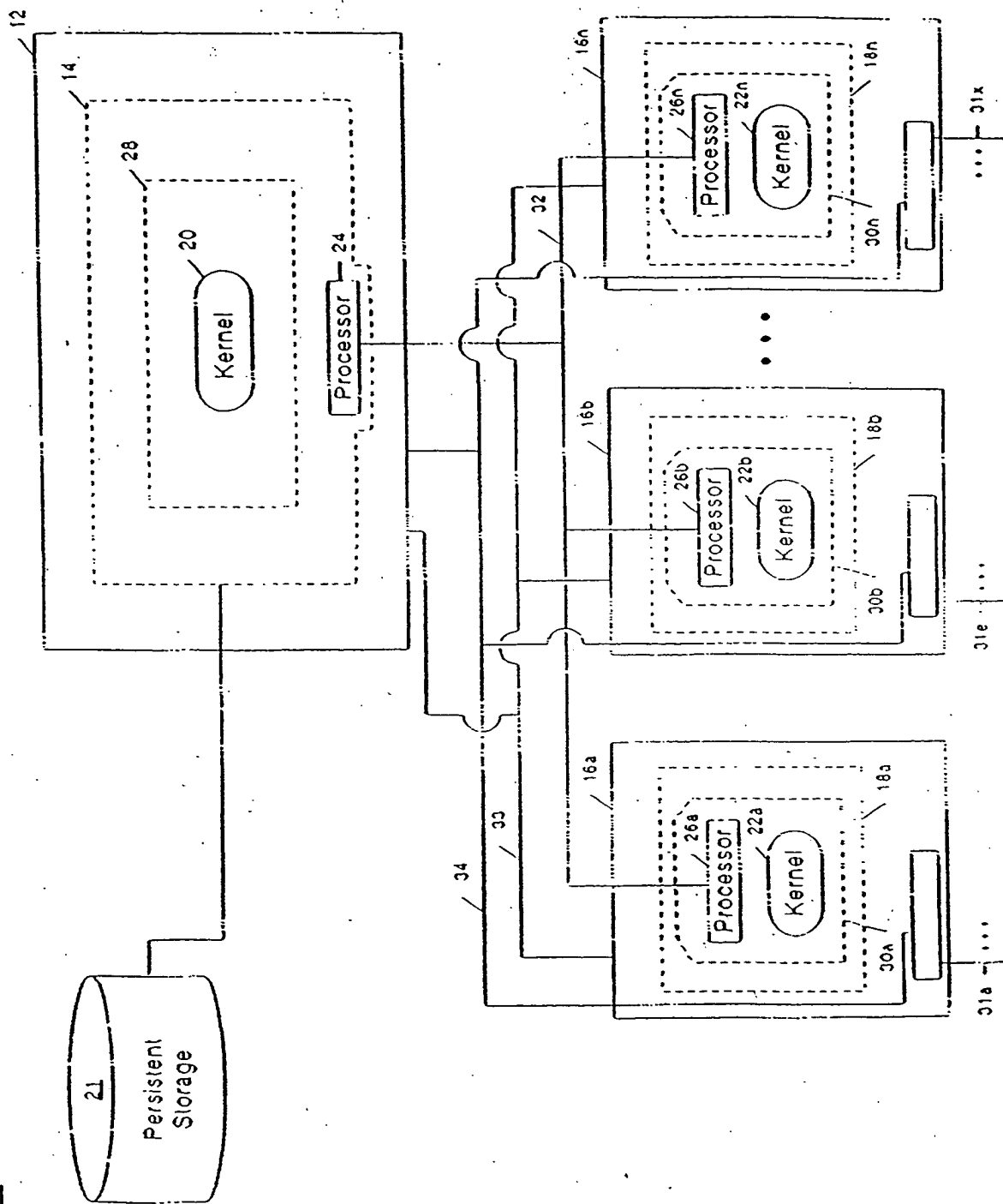


Fig. 2a

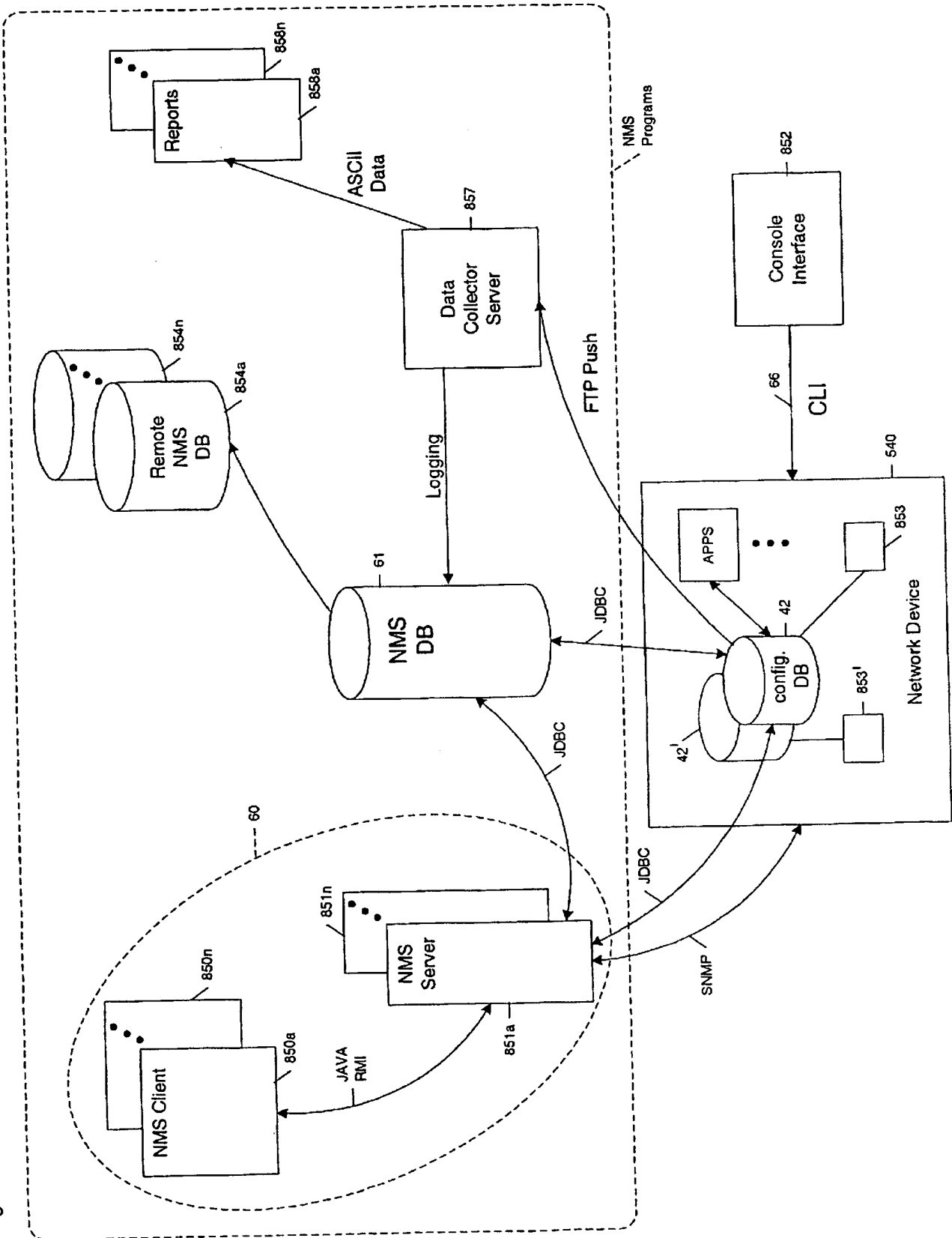


Fig. 2b

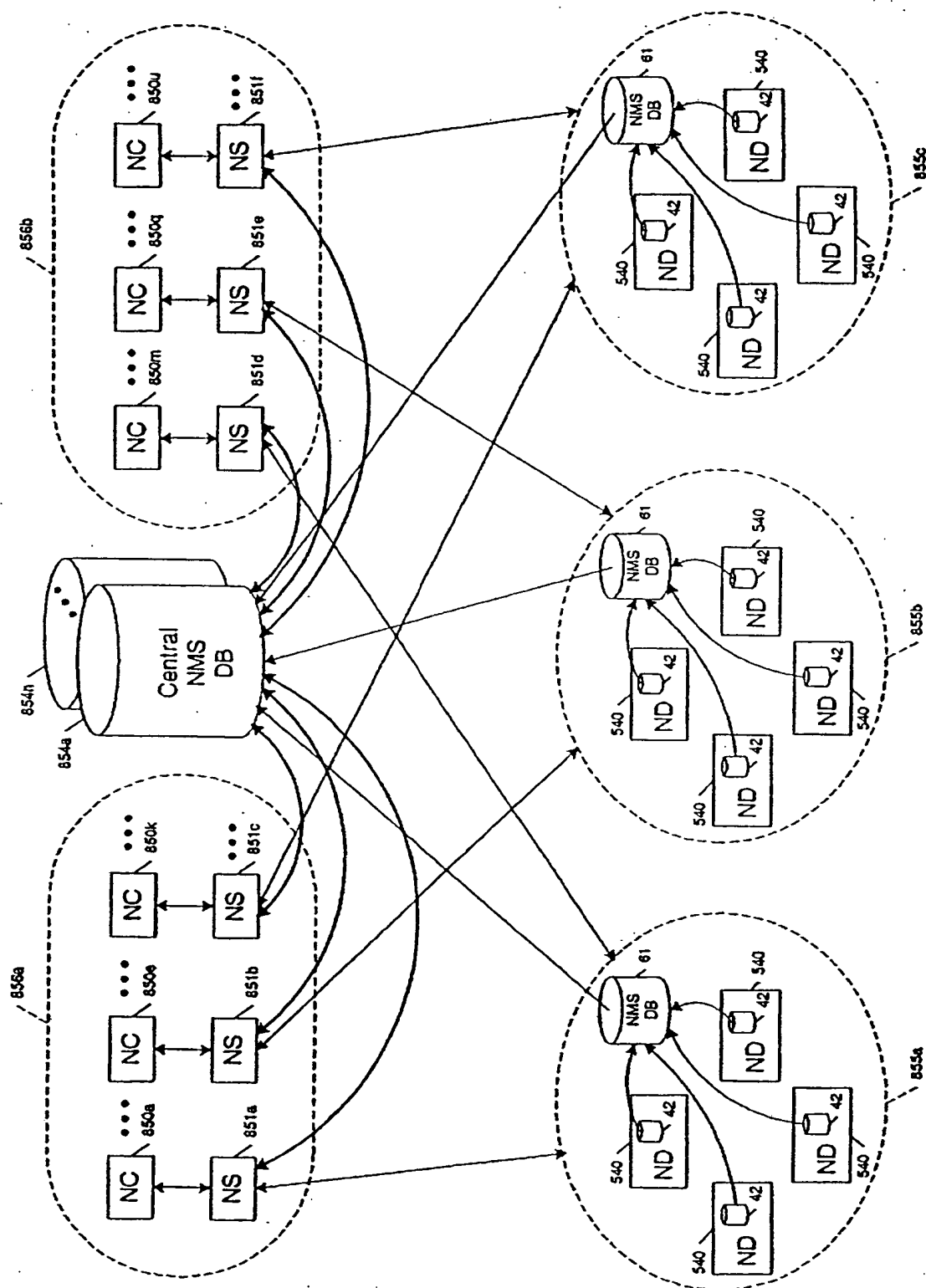
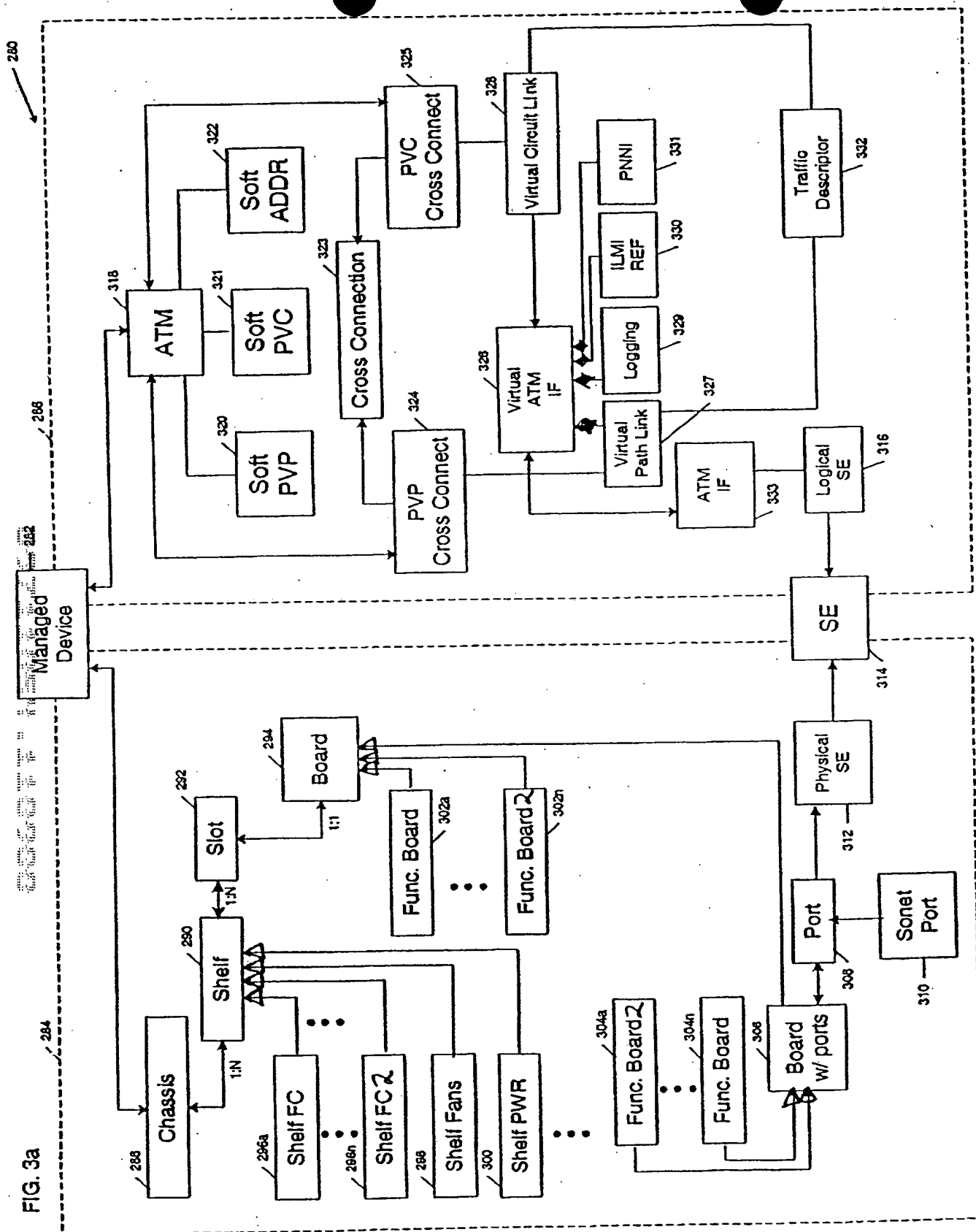
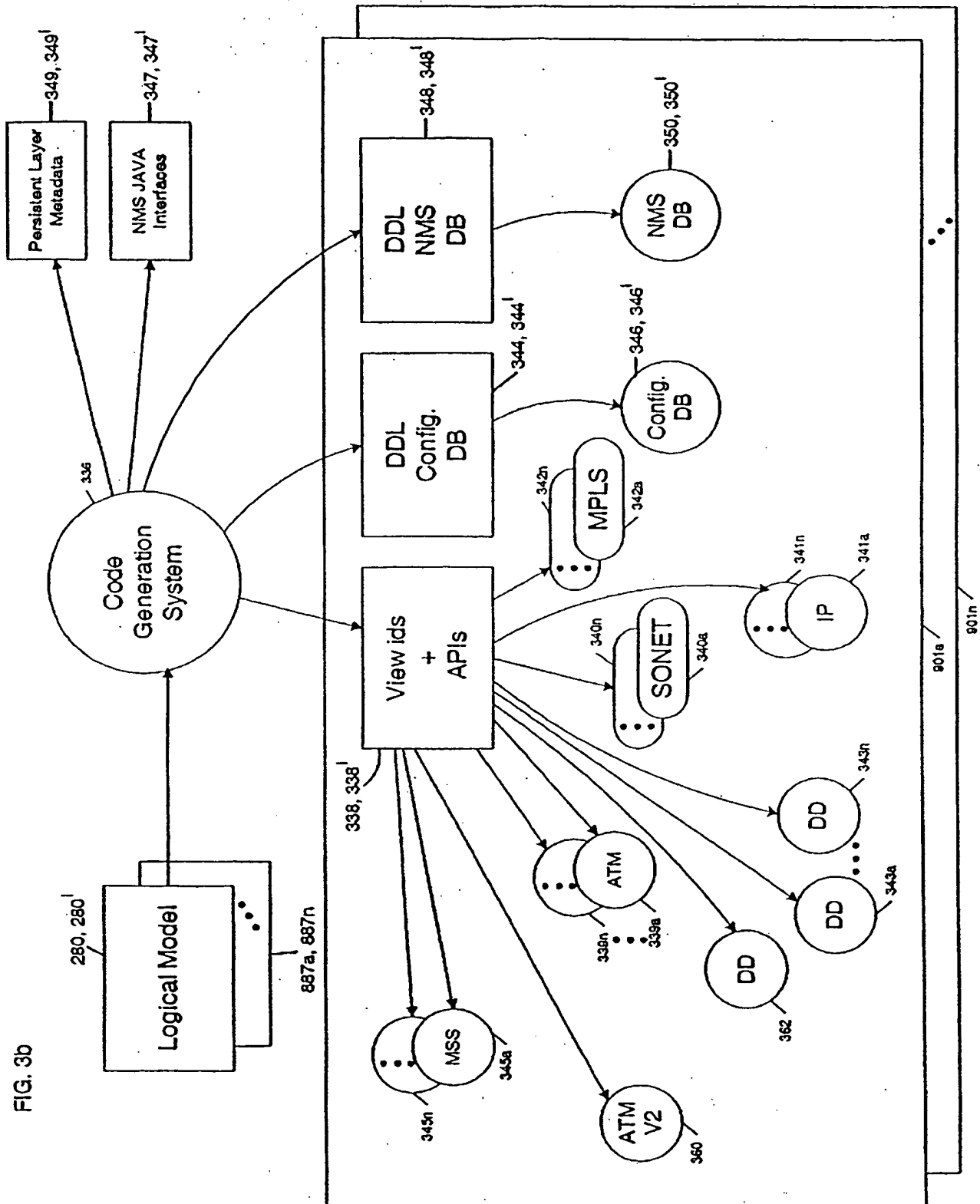


FIG. 3a





[illegible]

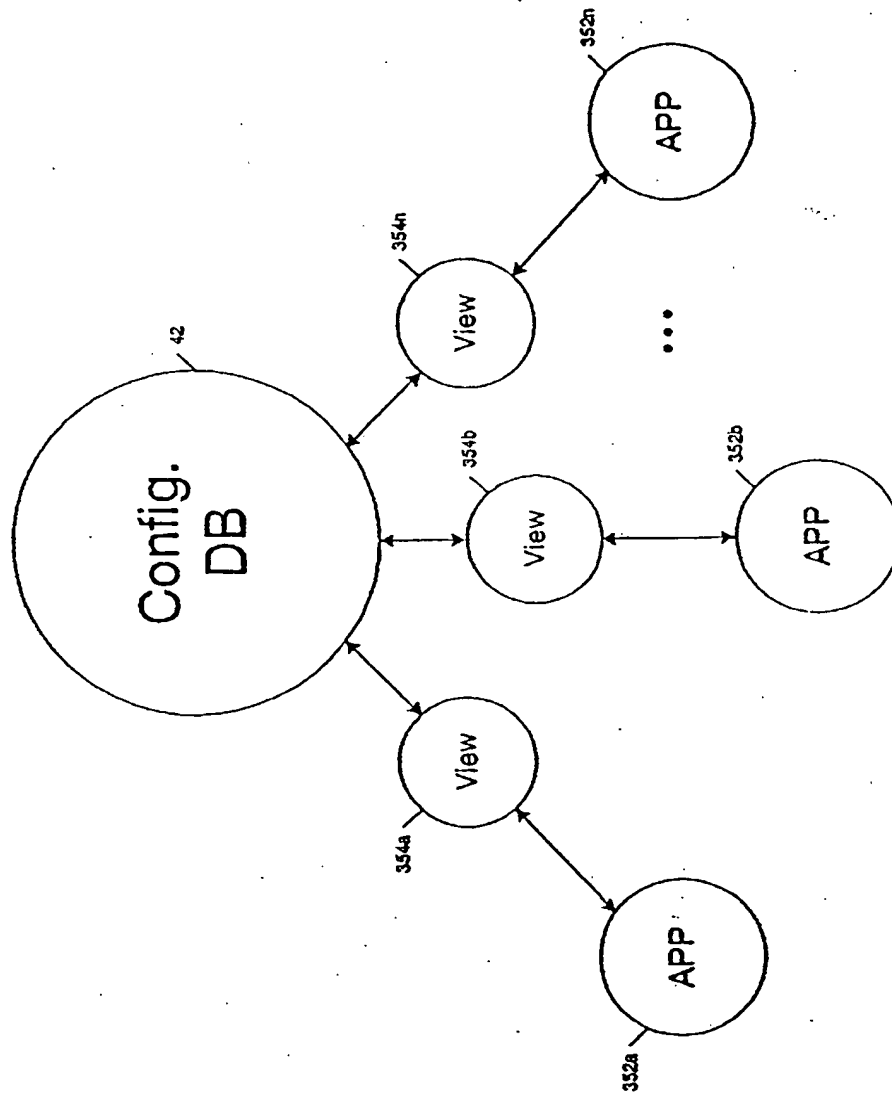
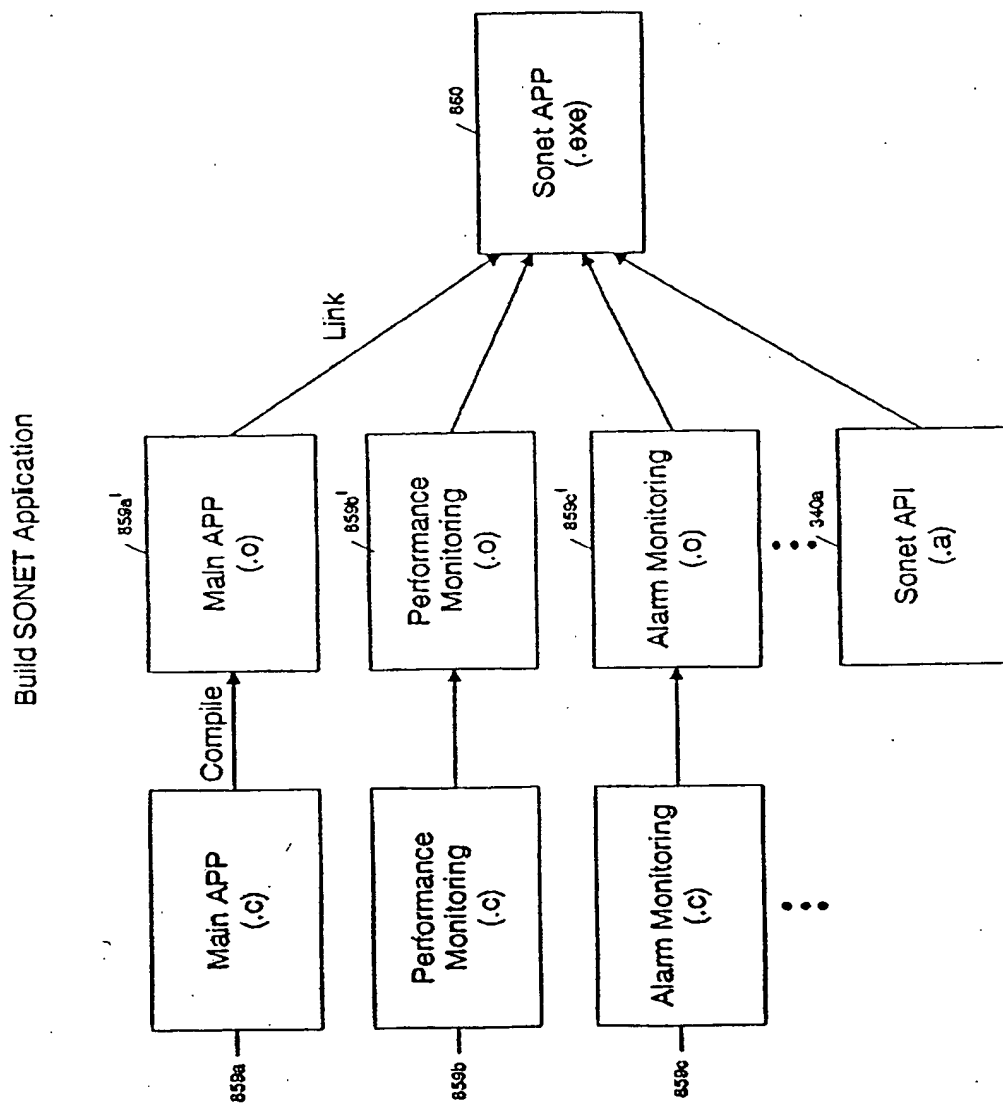


FIG. 3C

Fig. 3d



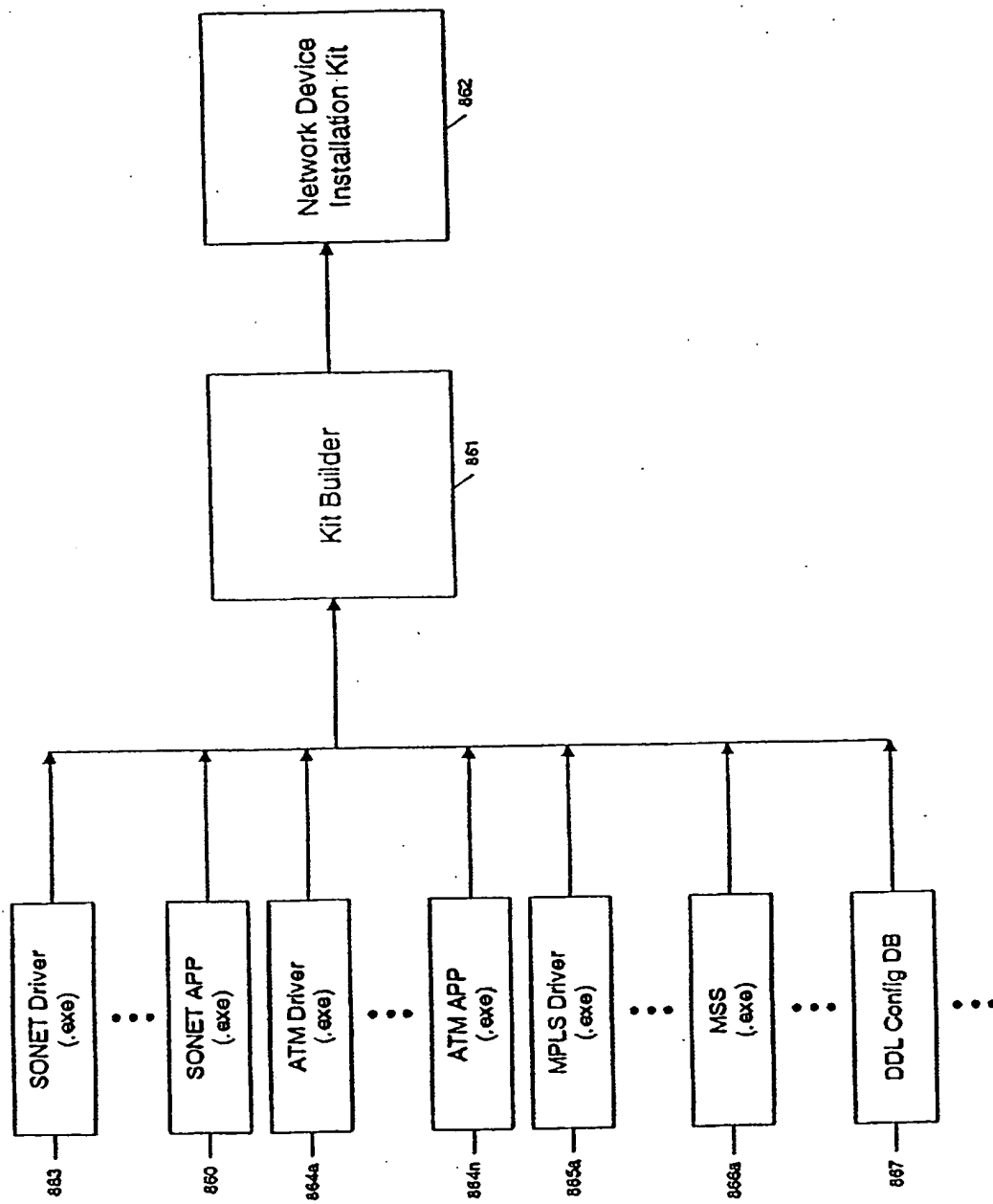


Fig. 3e

FIG. 3F is a block diagram of a system architecture for building an NMS installation kit. The system includes a Kit Builder (861) which receives input from five components: DDL NMS DB (868), NMS JAVA Interfaces (869), Persistent Layer Metadata (870), NMS Server (885), and NMS Client (886). The Kit Builder (861) then outputs the NMS Installation Kit (871).

Fig. 3F

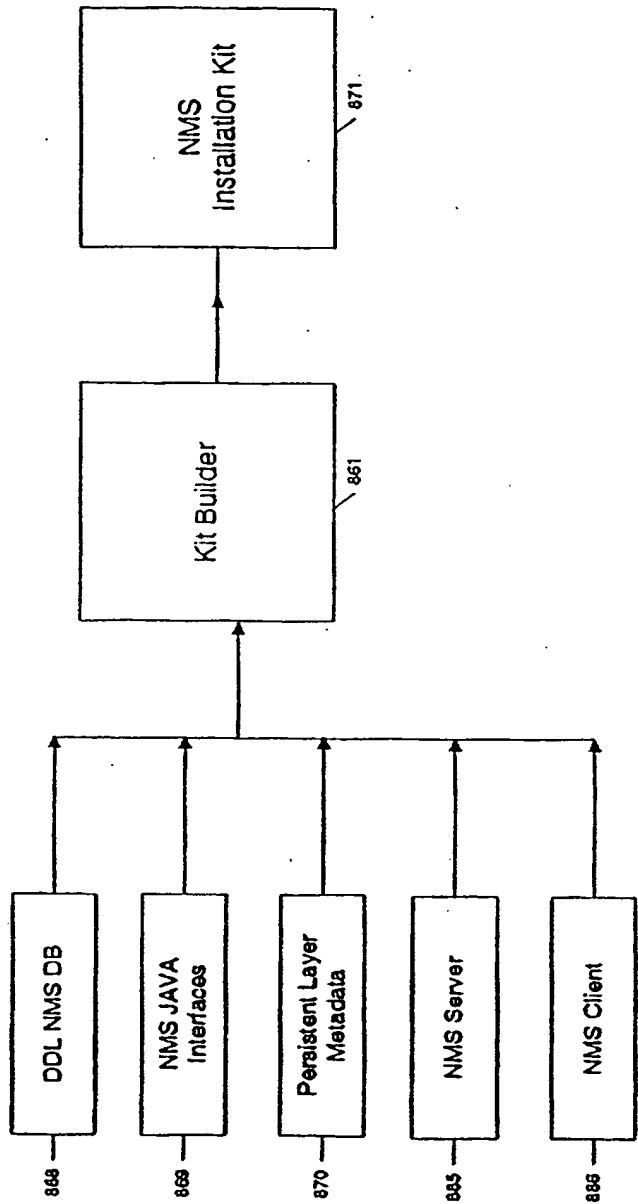


Fig. 3g

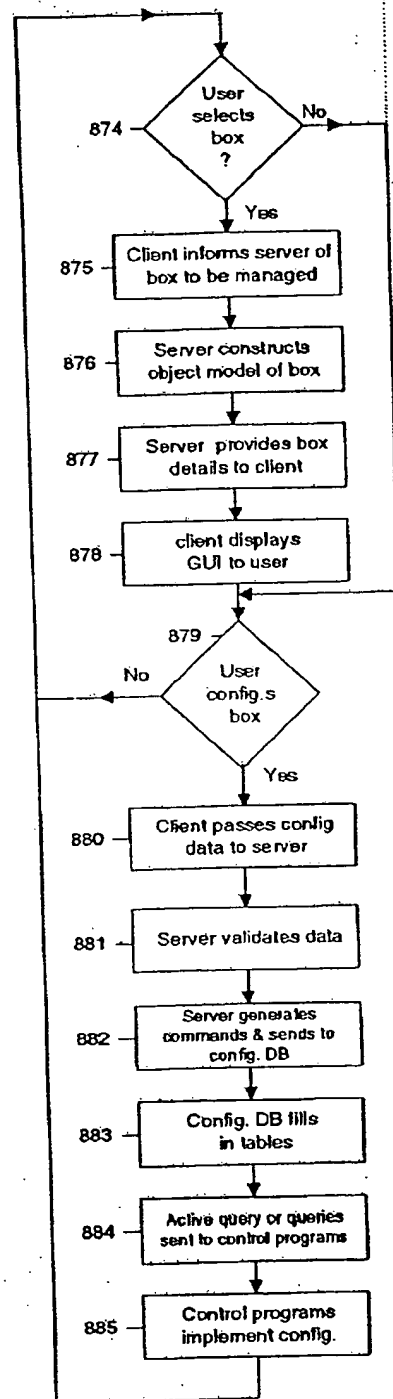
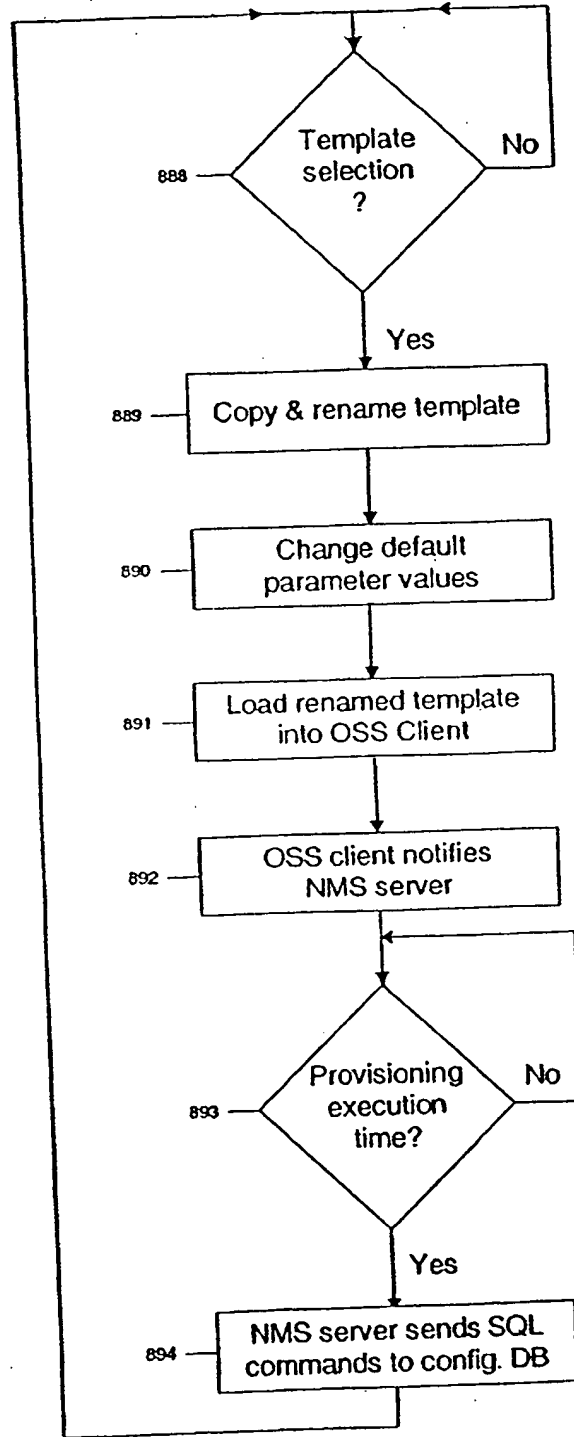


Fig. 3h

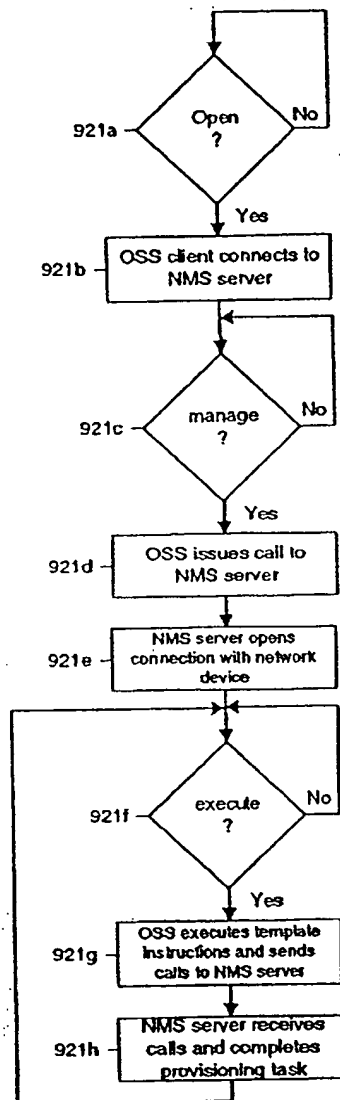


```
Command Prompt (2) - enetcli
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli> help
Commands are:
bye
close
execute
help
load
manage
open
quit
showCurrent
showTemplate
set
status
writeCurrent
writeTemplate
Enetcli>
Enetcli>
Enetcli> showCurrent SPATH
ATMIfName=ATMIf11/1/1
Concatenated=false
Name=Path11/1/1
Operant=SPATH
Operator=Create
PortID=1
Position=1
Service=AIM
ShelfID=11
SlotID=1
Type=Terminated
Version=V1_1_0_0
Width=STS3
Enetcli>
Enetcli>
Enetcli>
Enetcli> showTemplate SPATH
ATMIfName=<String>[TerminatedOnly]
Concatenated=<true|false>
Name=<String>
Operant=SPATH
Operator=<Create|Replace|Update|Delete>
PortID=<Integer><1-16>
Position=<Integer>
Service=<None|AIM>
ShelfID=<11|top1,13|bottom1>
SlotID=<Integer><1-8>
Type=<Switched|Terminated>
Version=V1_1_0_0
Width=<STS1|STS3|STS12|STS48>
Enetcli>
Enetcli>
Enetcli> status
Not currently connected to server
Supporting templates: CONTROL, PUC, SPATH, SPUC, ID, and UAIF
Enetcli>
```

Fig. 3i



Fig. 3j



F-3K

Command Prompt (2) - enetcli

```
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli>
Enetcli> showCurrent CONTROL
Input=Q:\nns\con\equipecon\nns\utils\enetcli
Interactive=false
Operant=CONTROL
Operator=Manage
Output=Q:\nns\con\equipecon\nns\utils\enetcli
Password=None
System=192.168.9.202
User=None
Version=01_1_0_0
Server=localhost
Enetcli>
```

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Fig. 3L

← 924 BATCH

Operant=BATCH

Operator=Execute

Version=V1\_1\_0\_0

924a-Task1=execute-SPATH

9246 —Task2=execute-PVC

924c—Task3=execute-SPVC

924d-Task4=load-SPVC-spvc1

924e—Task5=execute-SPVC

924f —Task6=load-SPVC-spvc2

924c-Task7=execute-SPVC

9249 - Task50=sct-SPATH-PortID-3

924h—Task51=execute-SPATH

924i—Task52=set-SPATH-SlotID-2

924) -Task53=executc-SPATH

[illegible]

Fig. 3M

← 925

Operant=BATCH

Operator=Execute

-- Version=V1\_1\_0\_0

925a -- Task1=execute-CONTROL

925b -- Task2=execute-SPATH

925c -- Task3=set-SPATH-PortID-3

925d -- Task4=execute-SPATH

925e -- Task61=set-CONTROL-System-192.168.9.201

925f -- Task62=execute-CONTROL

925g -- Task63=execute-SPATH

925h -- Task108=close

925i -- Task109=set-CONTROL-Server-Server1

925j -- Task110=set-CONTROL-System-192.168.8.200

925k -- Task111=execute-CONTROL

925l -- Task112=execute-SPATH

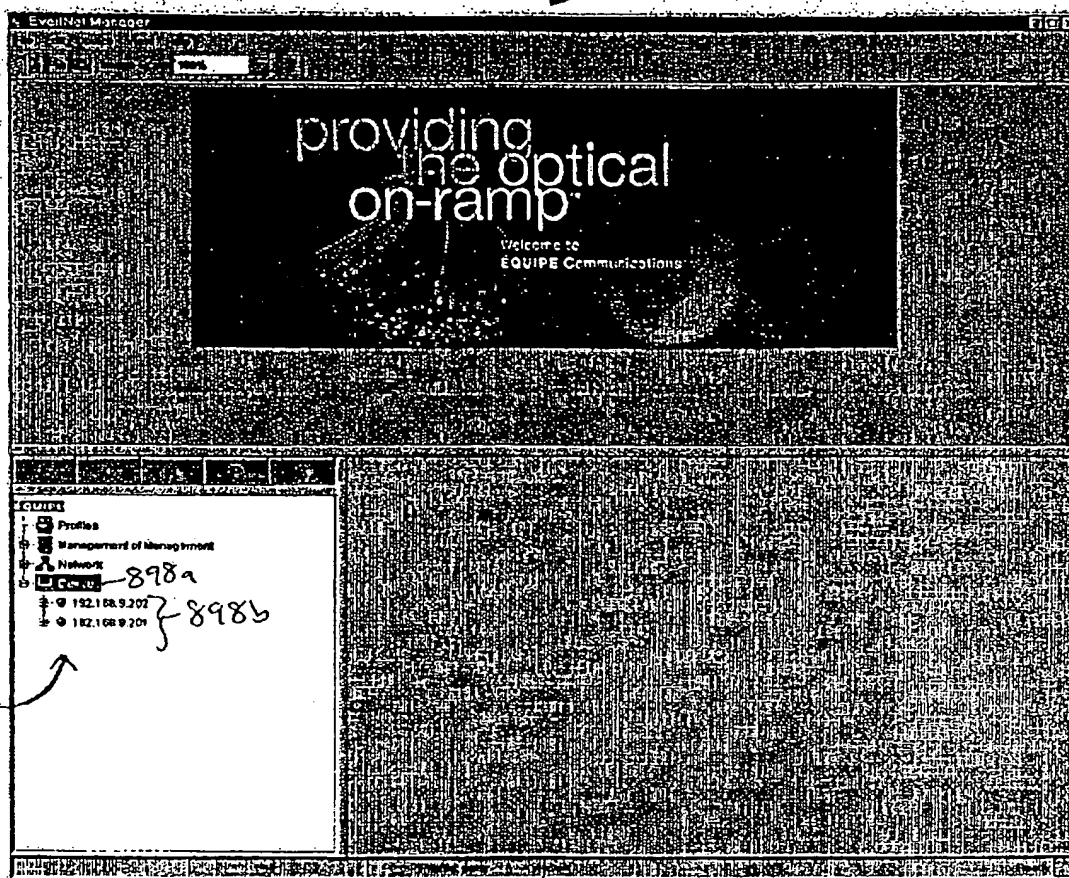


Fig. 4a

895

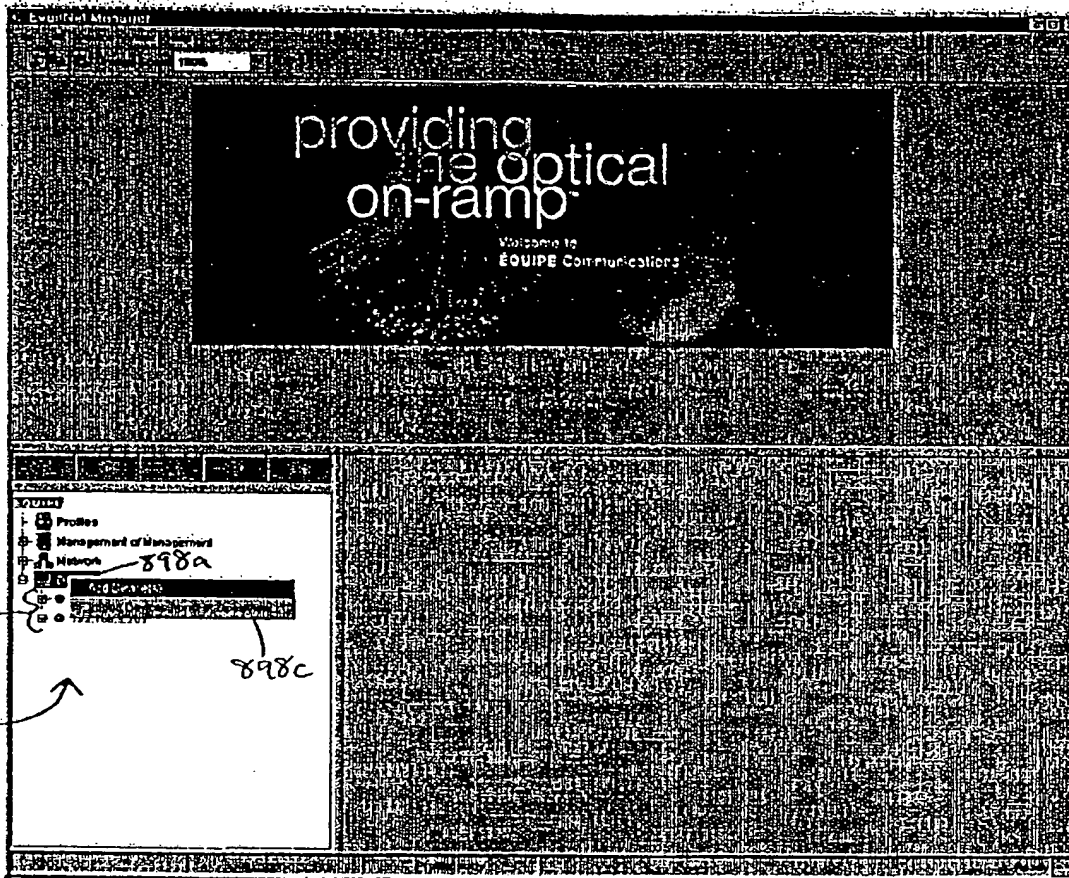


Fig. 4b

Fig. 4c

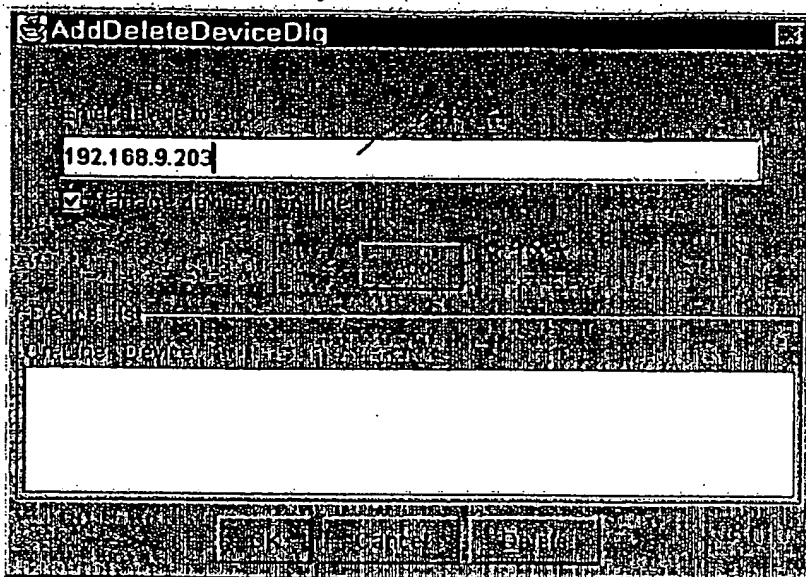
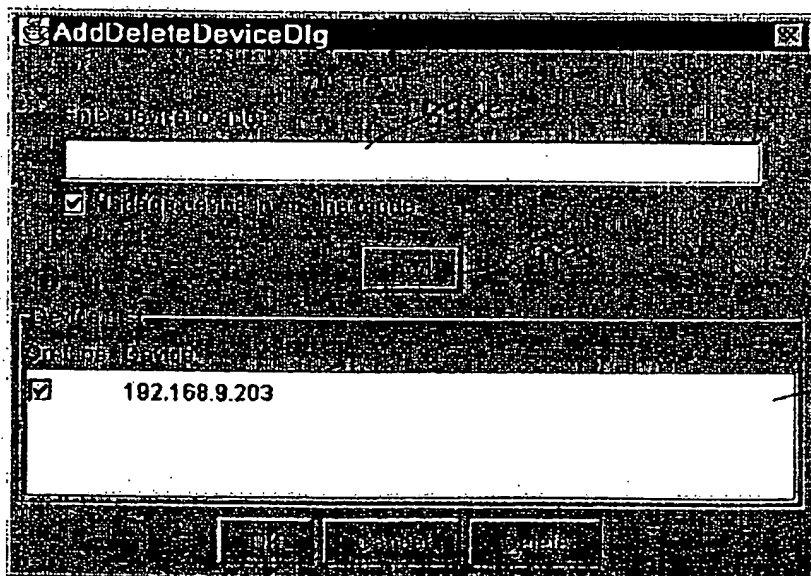


Fig. 4d



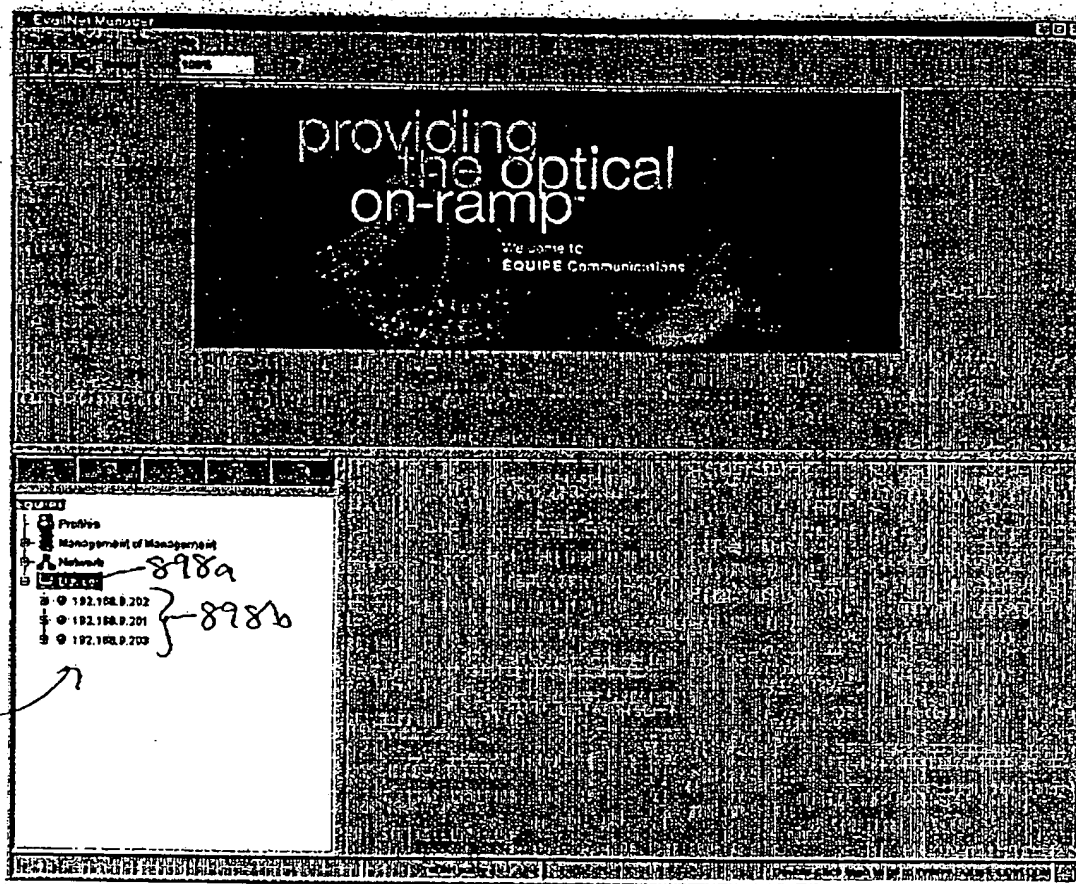


Fig. 4e



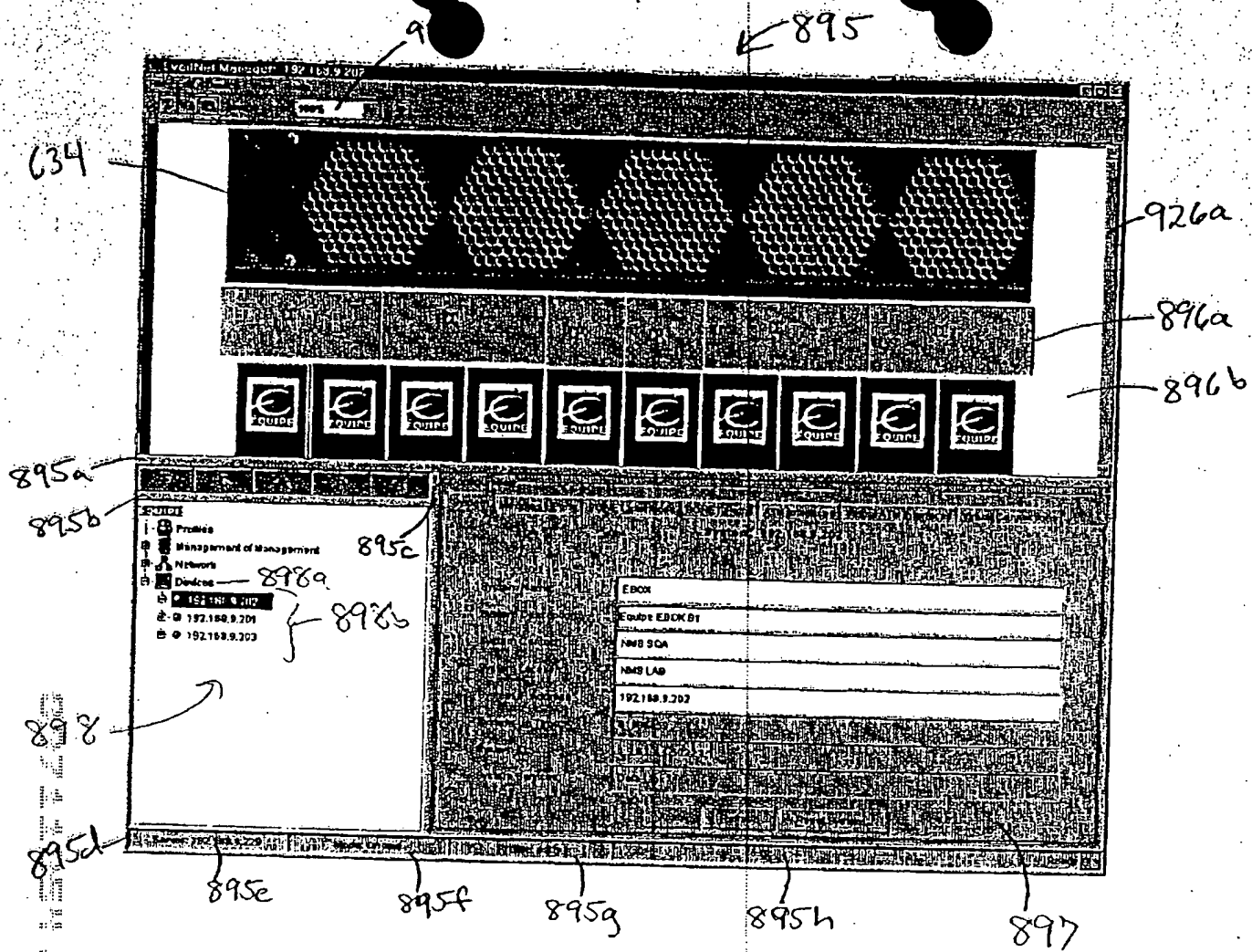


Fig. 4f

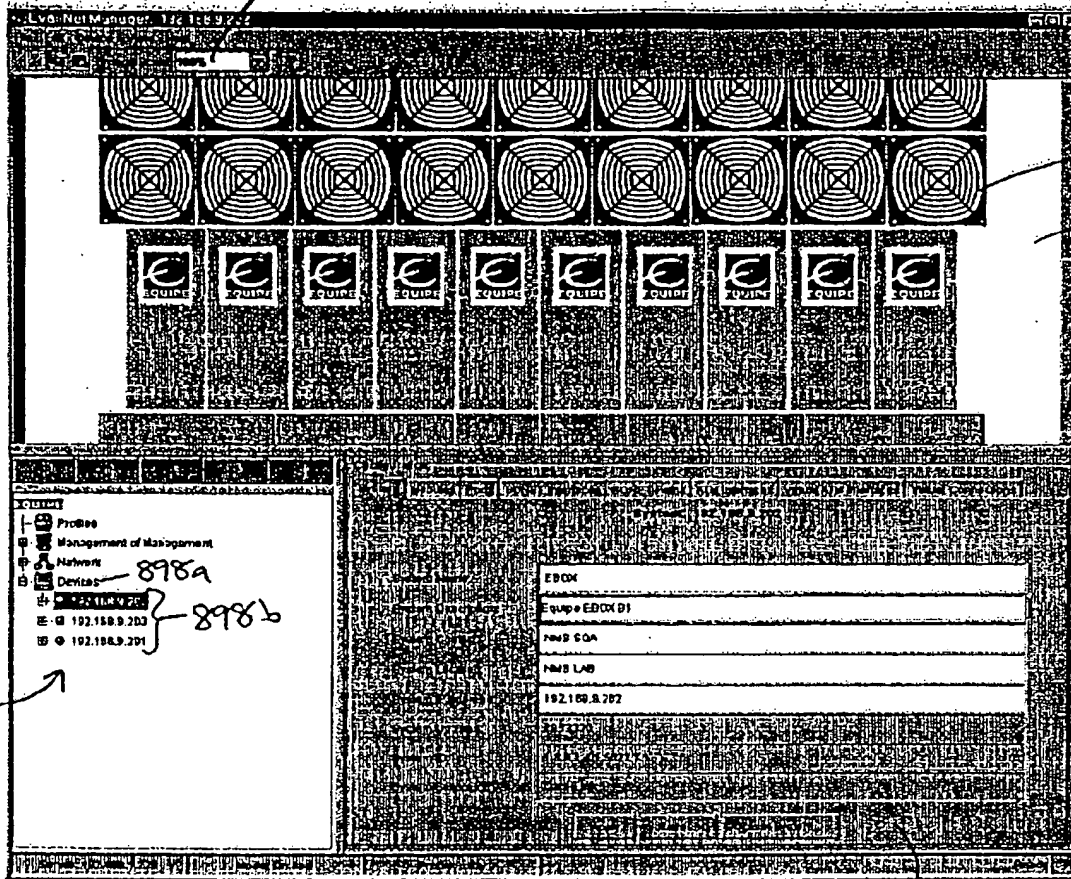


Fig. 4g

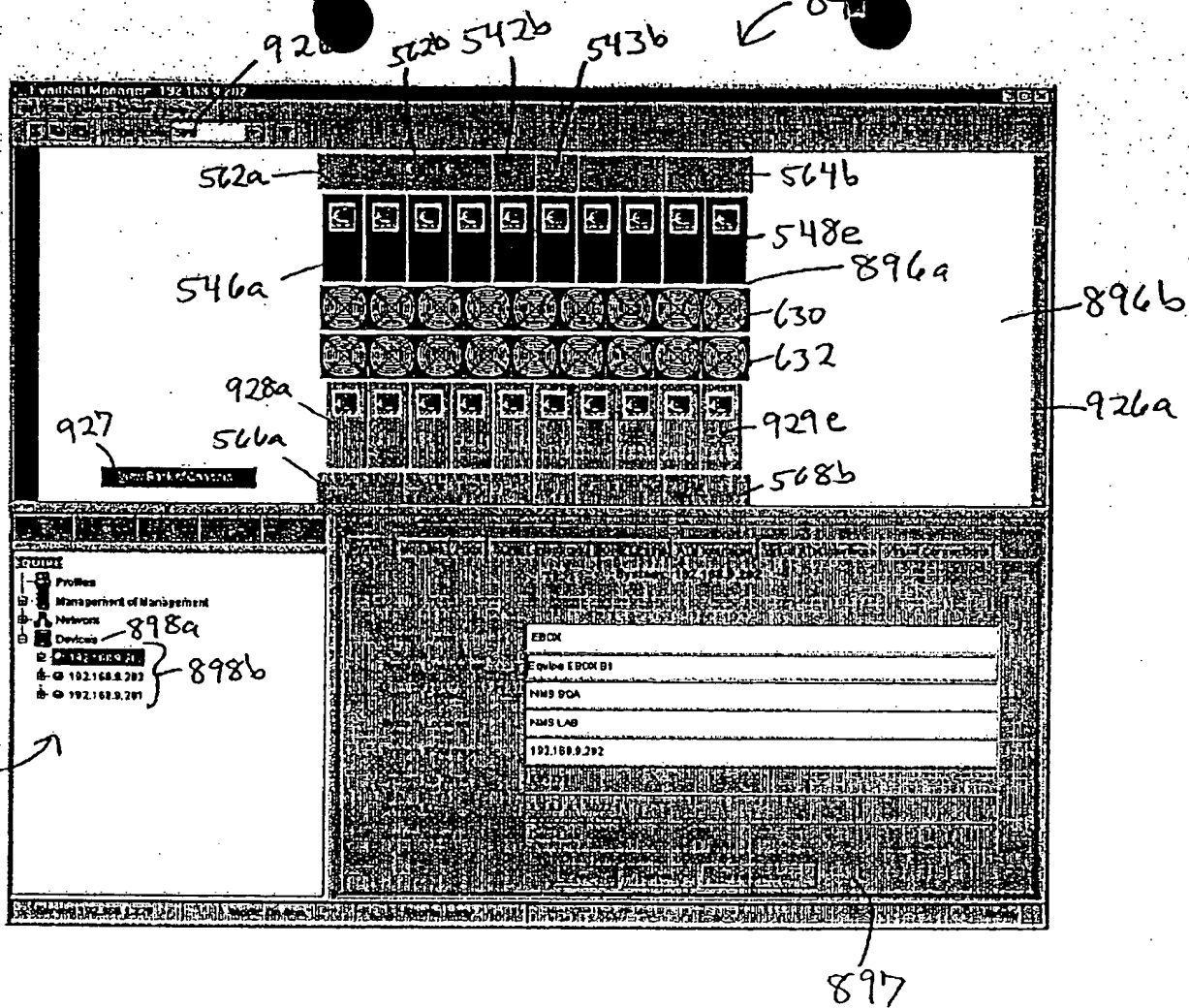


Fig. 4h

896b

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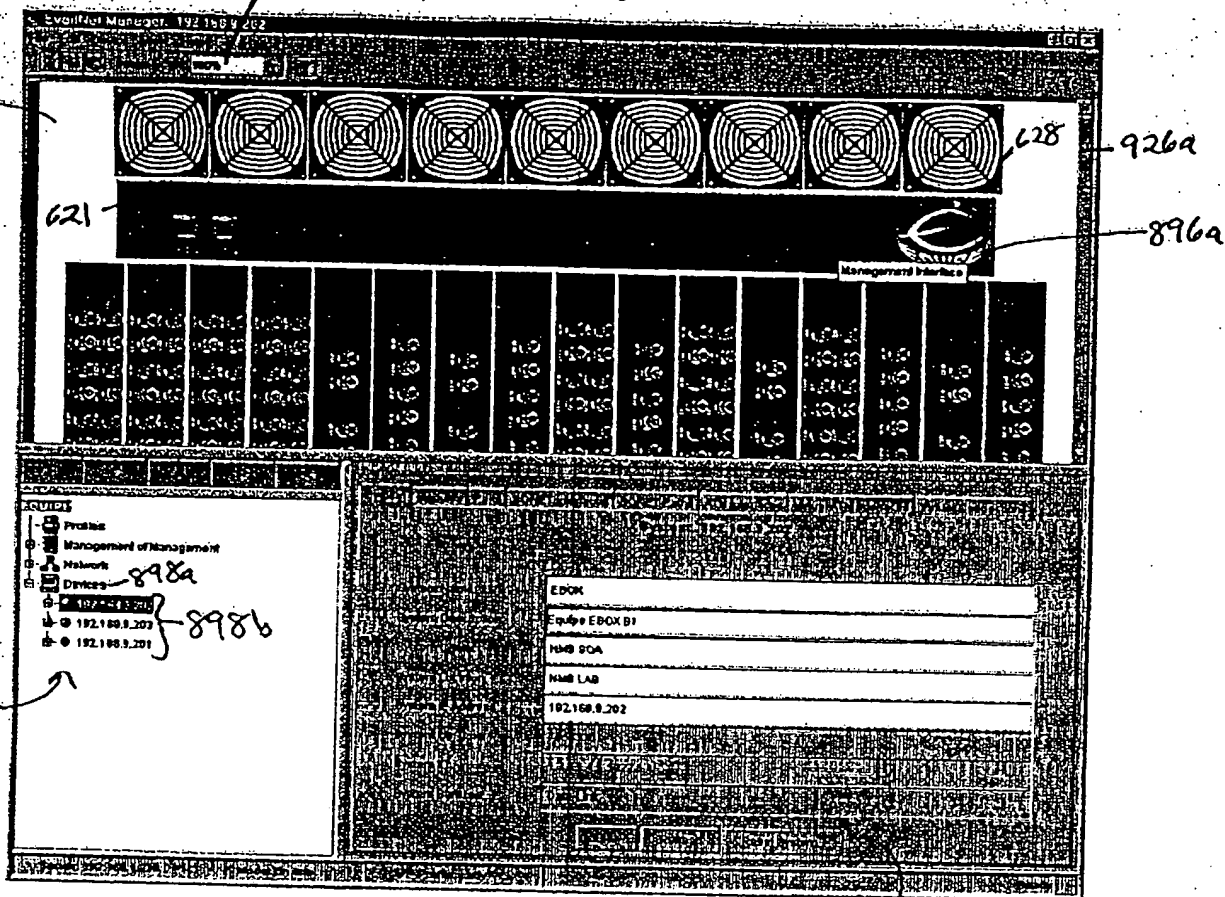


Fig. 4i

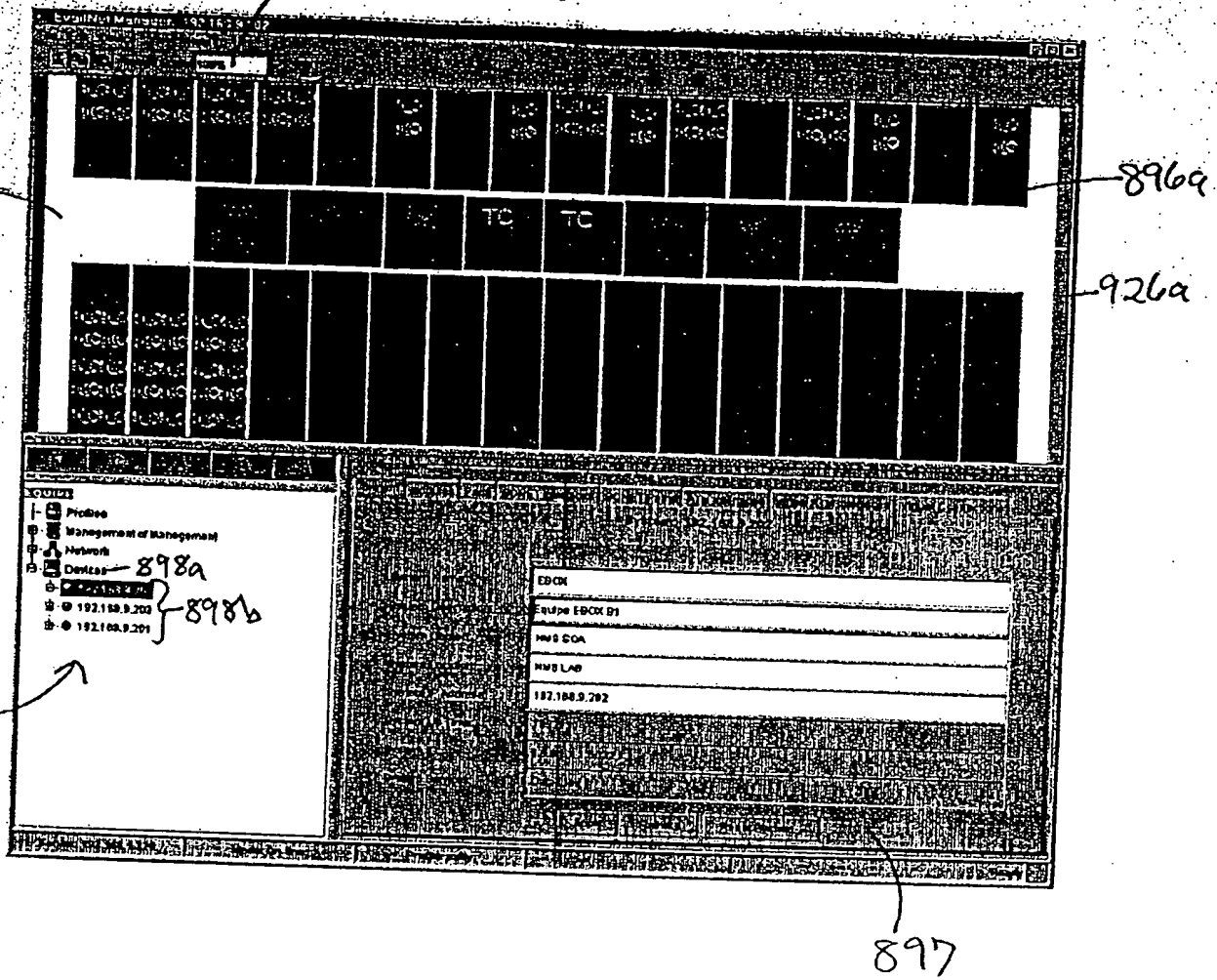


Fig. 4j

896b

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920

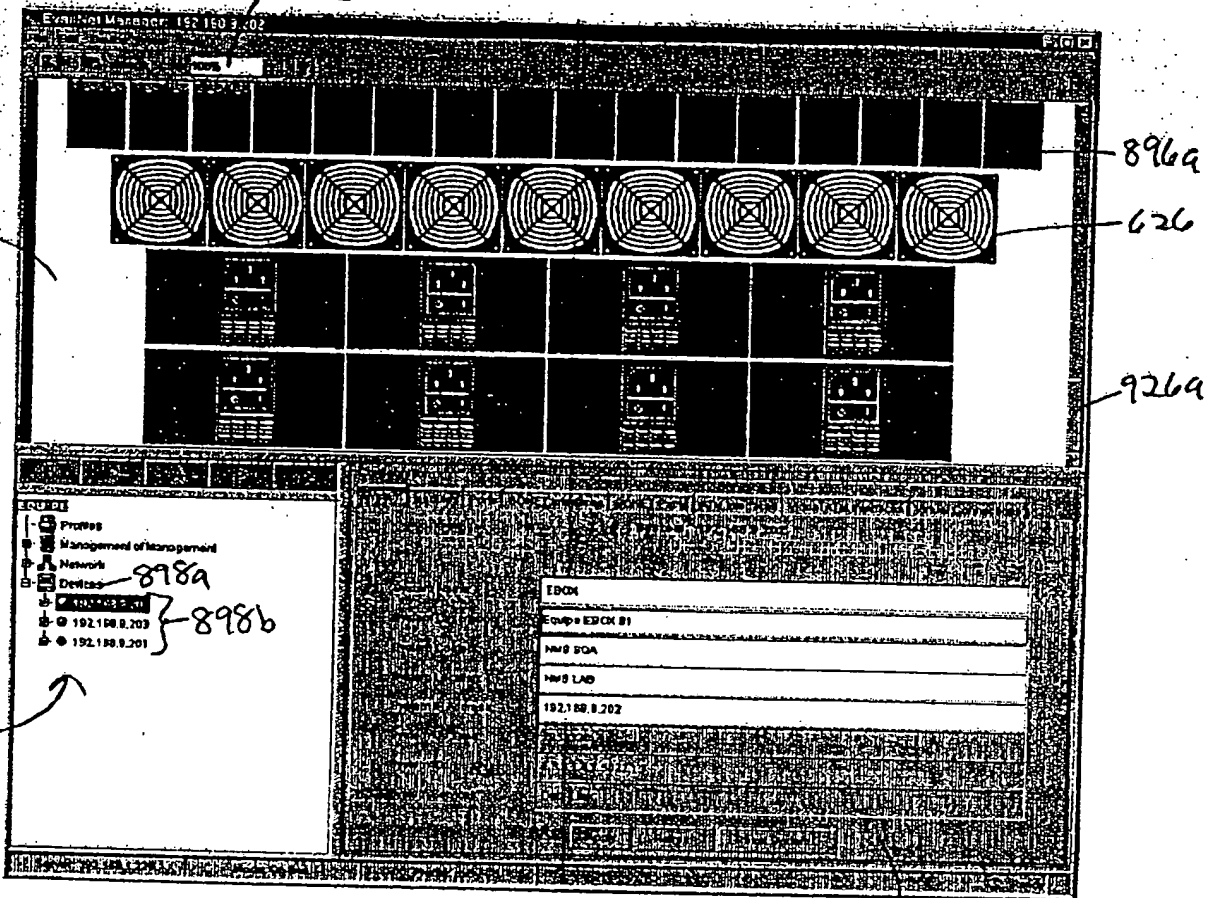


Fig. 4K

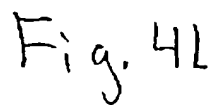


Fig. 42

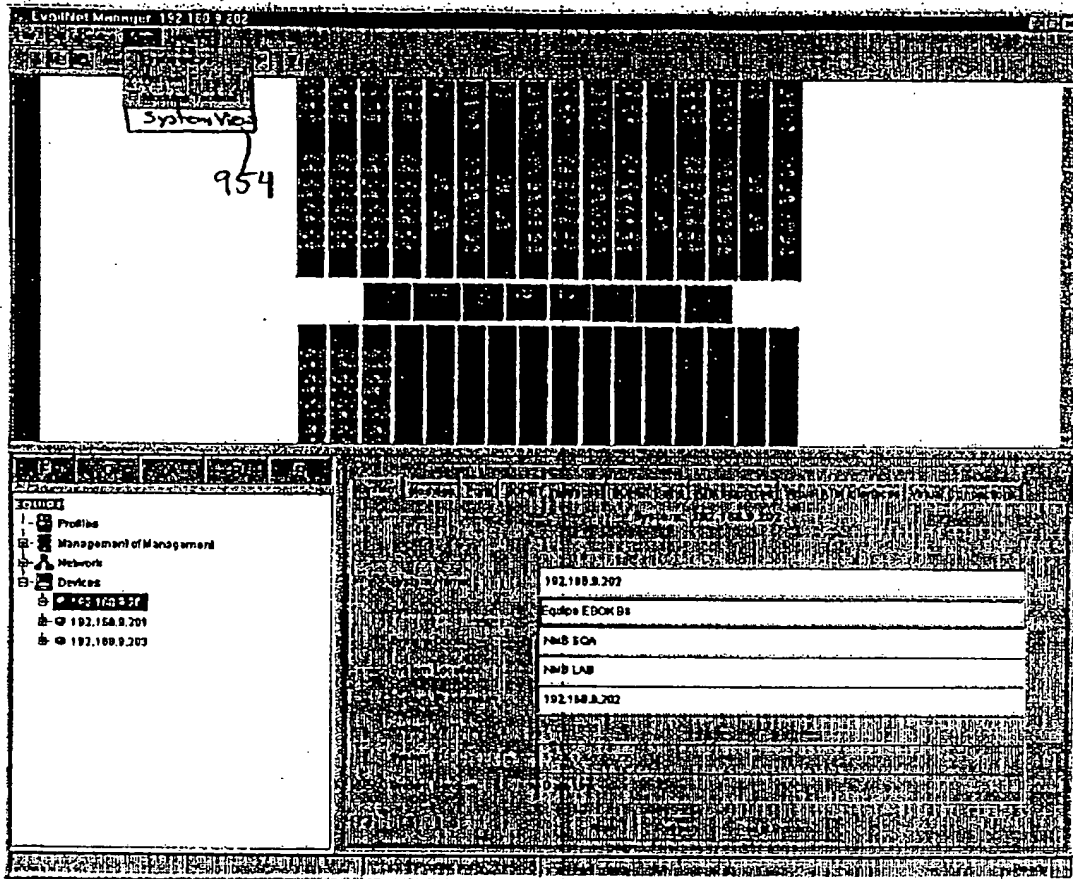
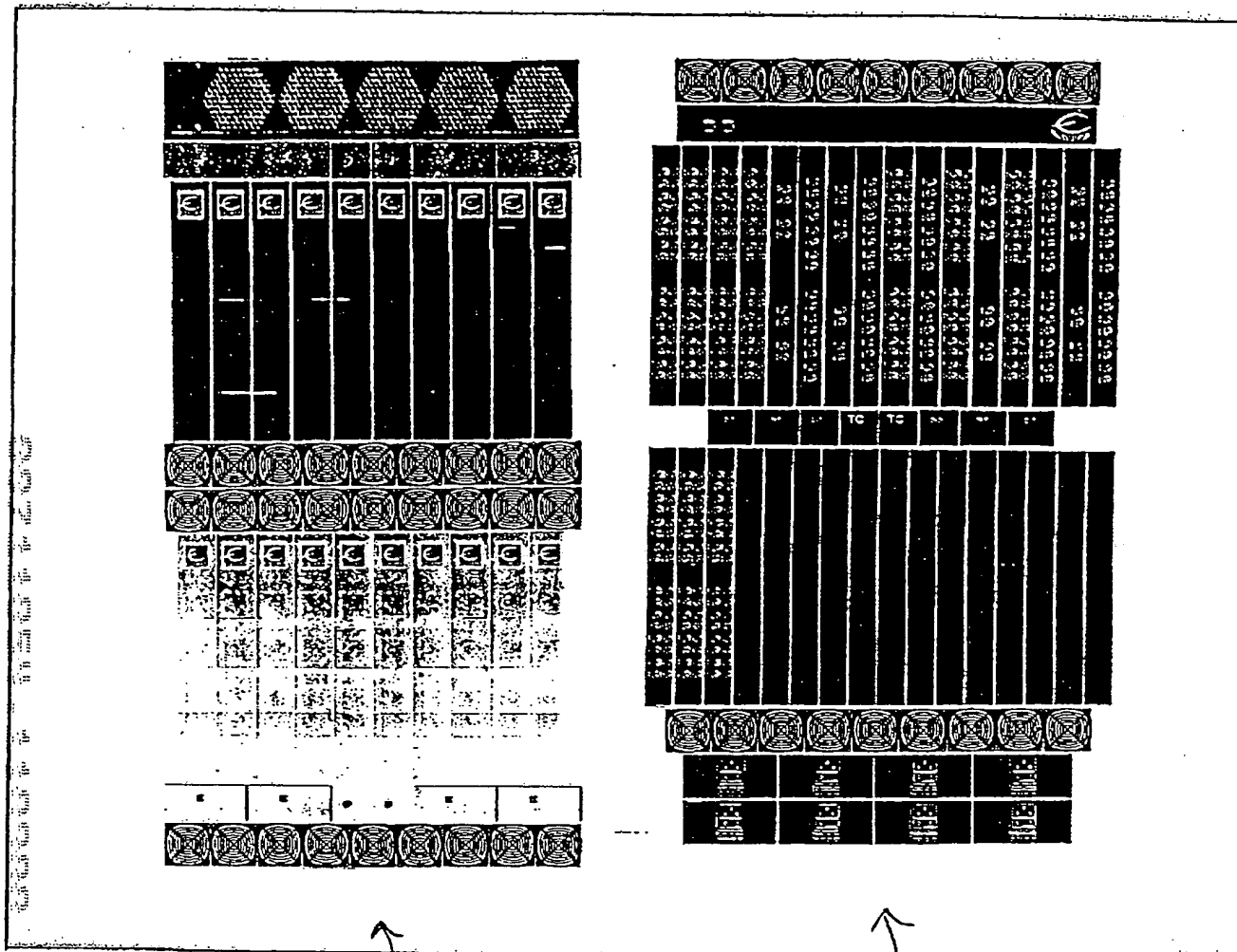


Fig. 4m



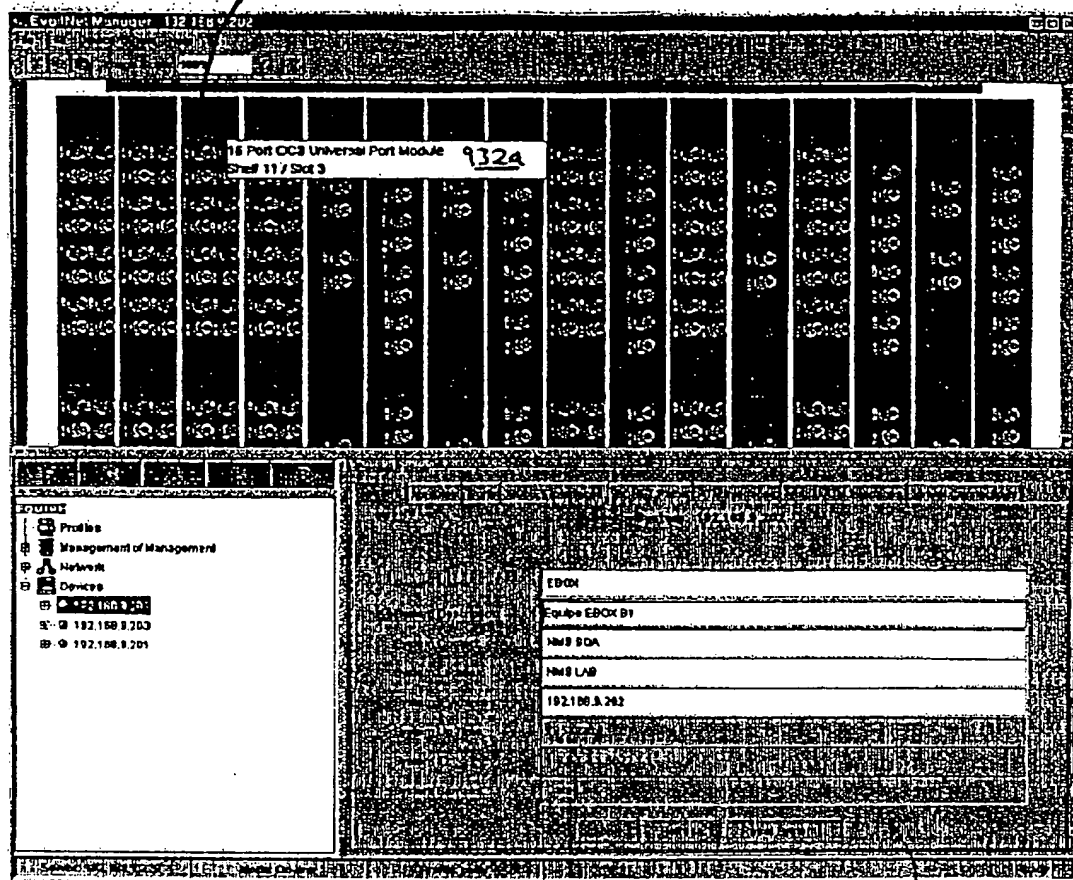
955

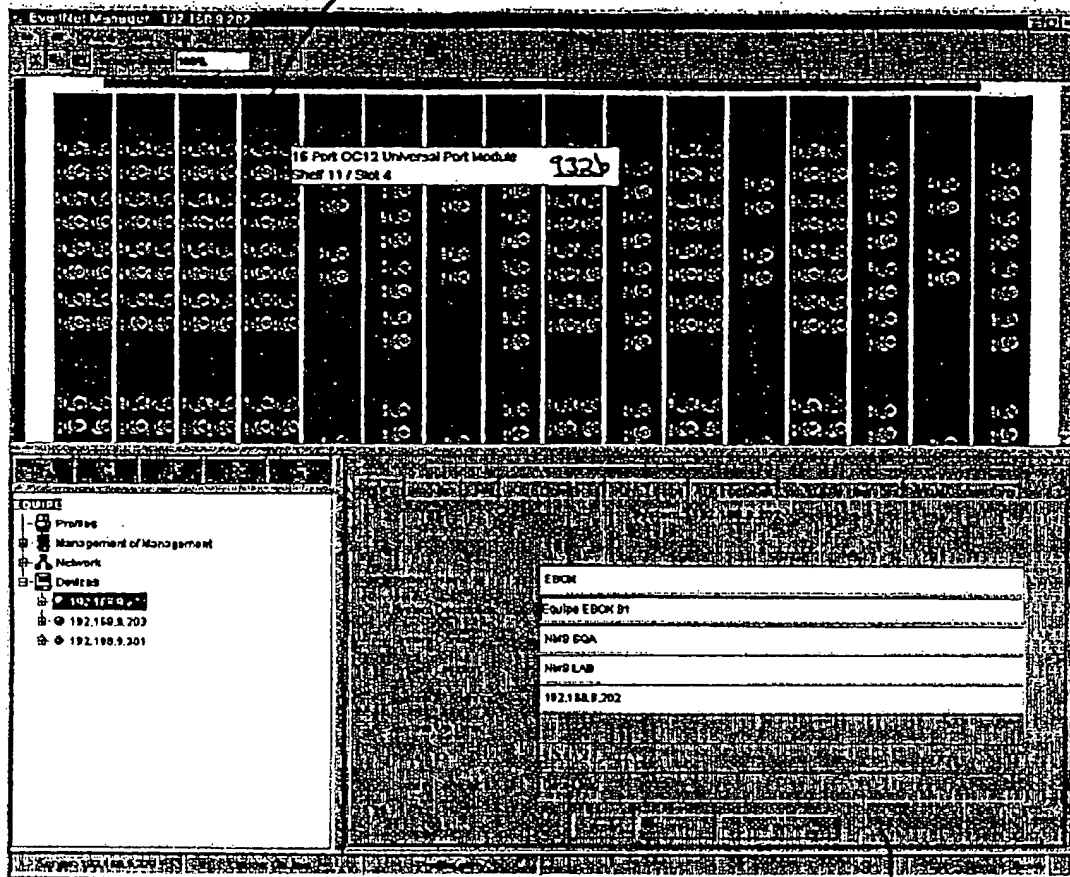


955a

955b

Fig. 4n





897

Fig. 4p

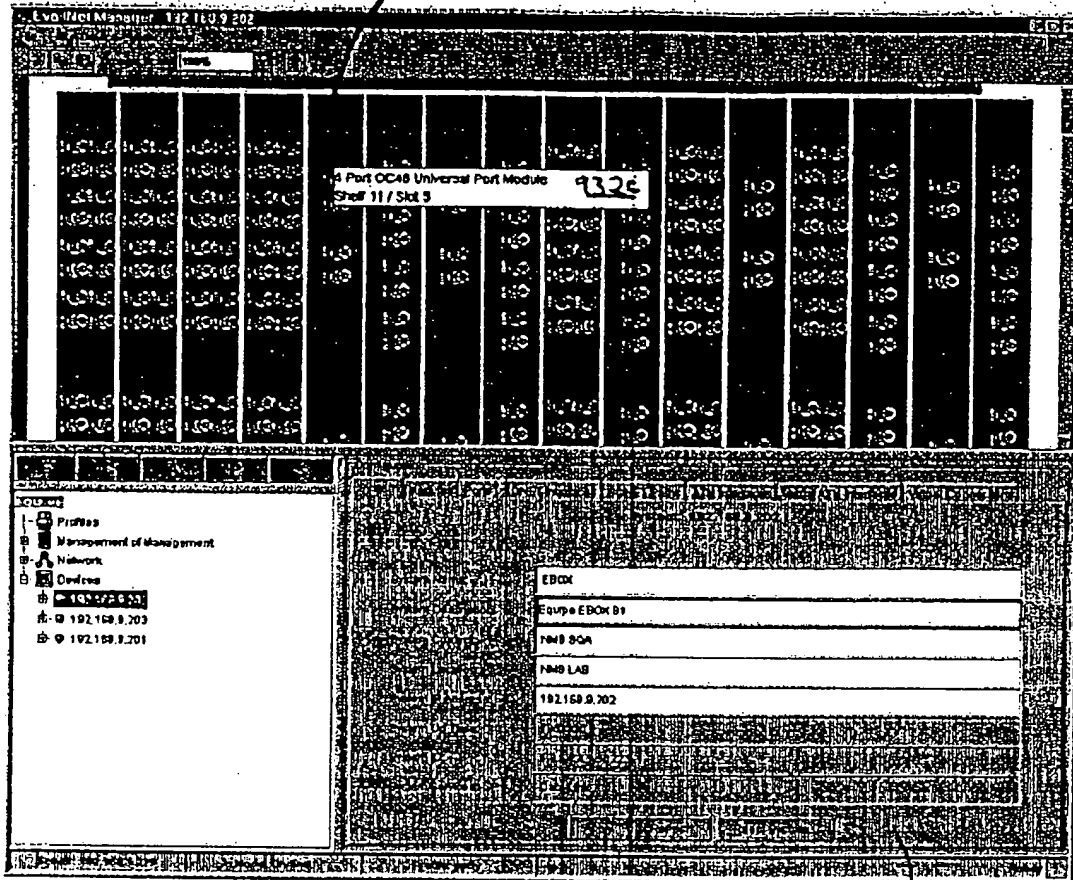


Fig. 4g

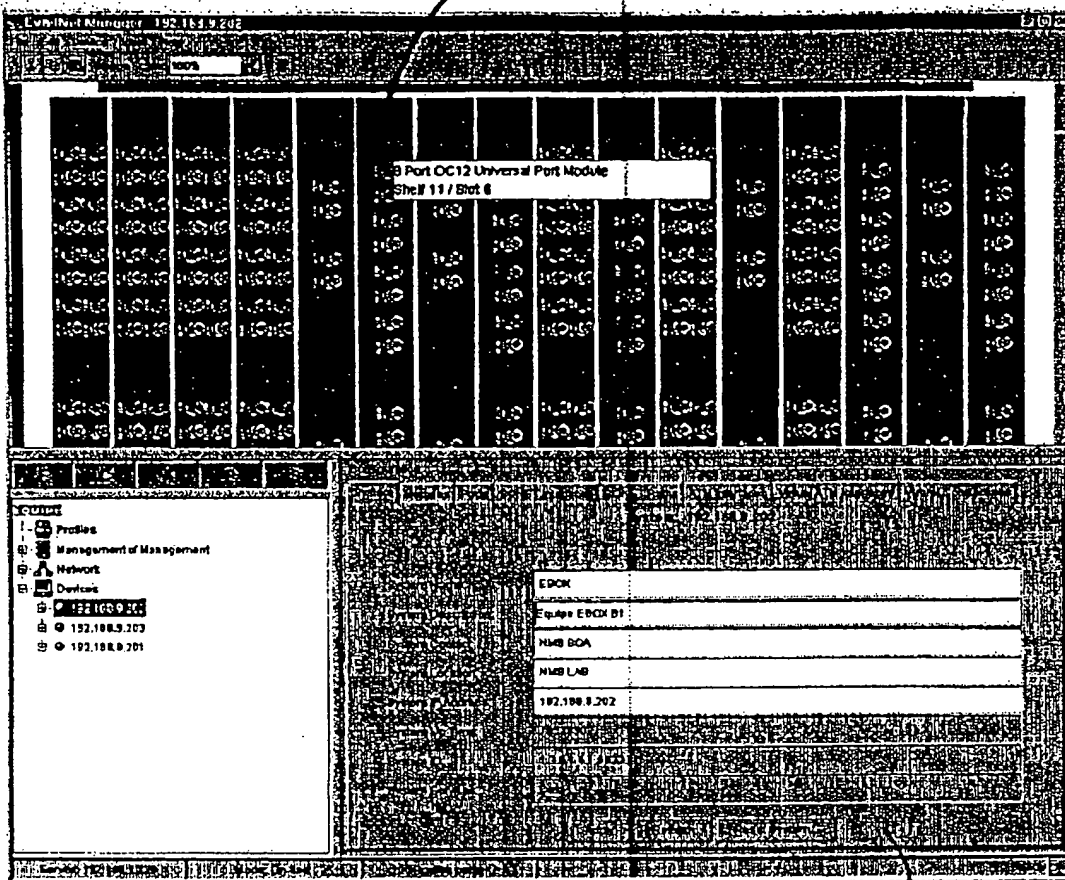


Fig. 4r

895

133

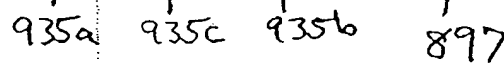


Fig. 4s

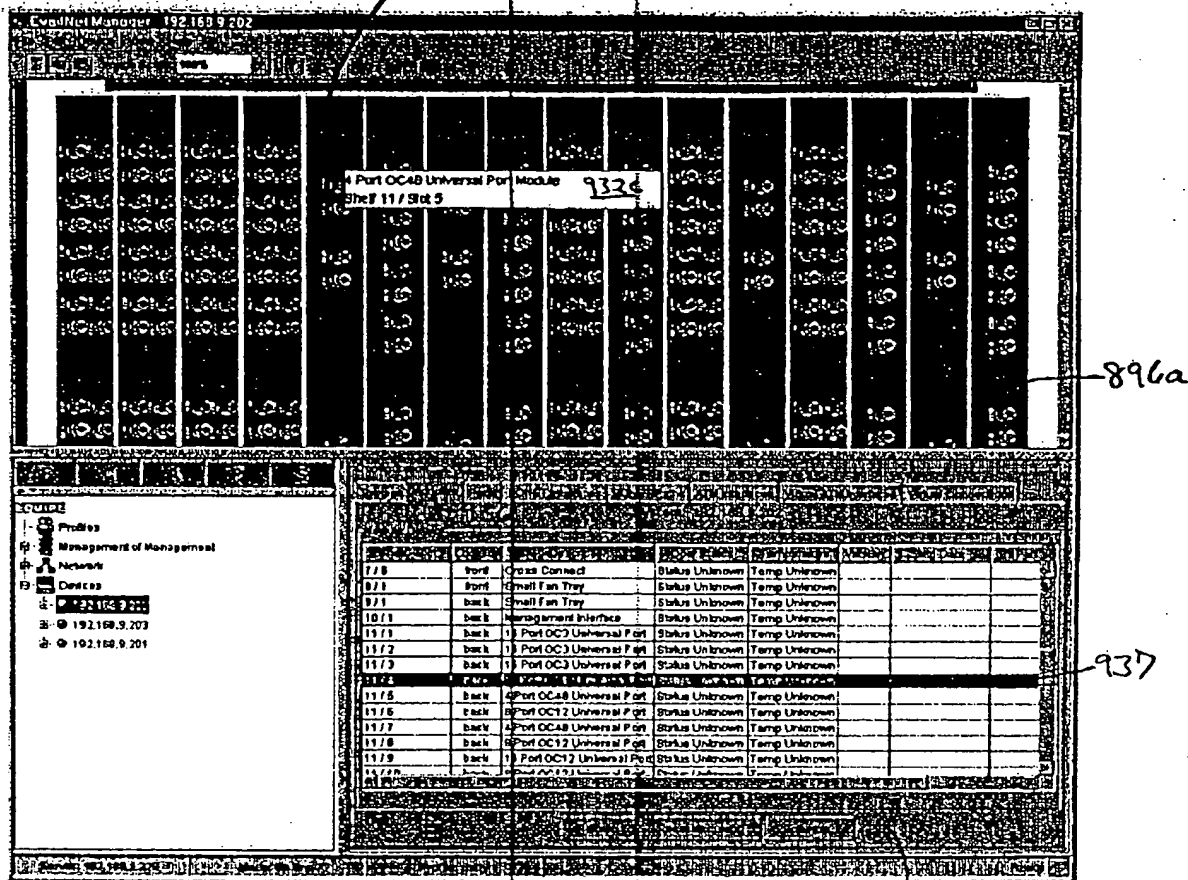


Fig. 44

897

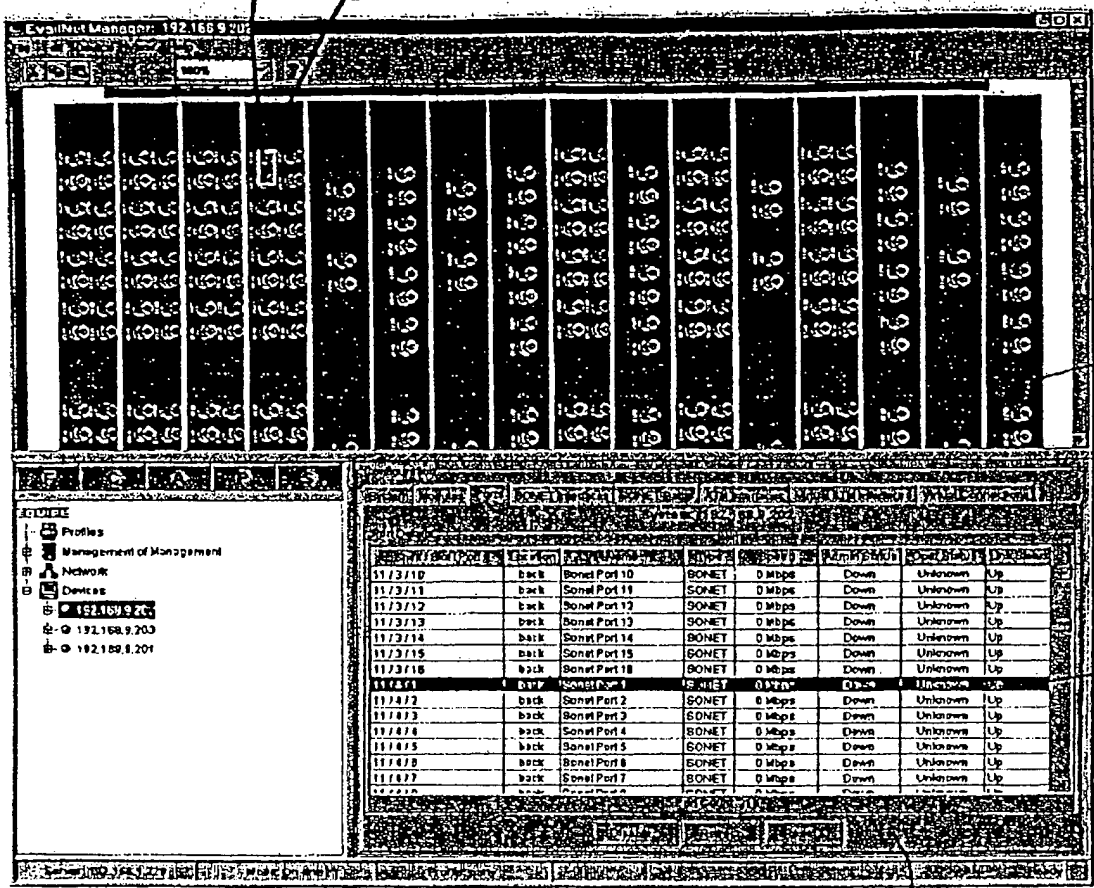
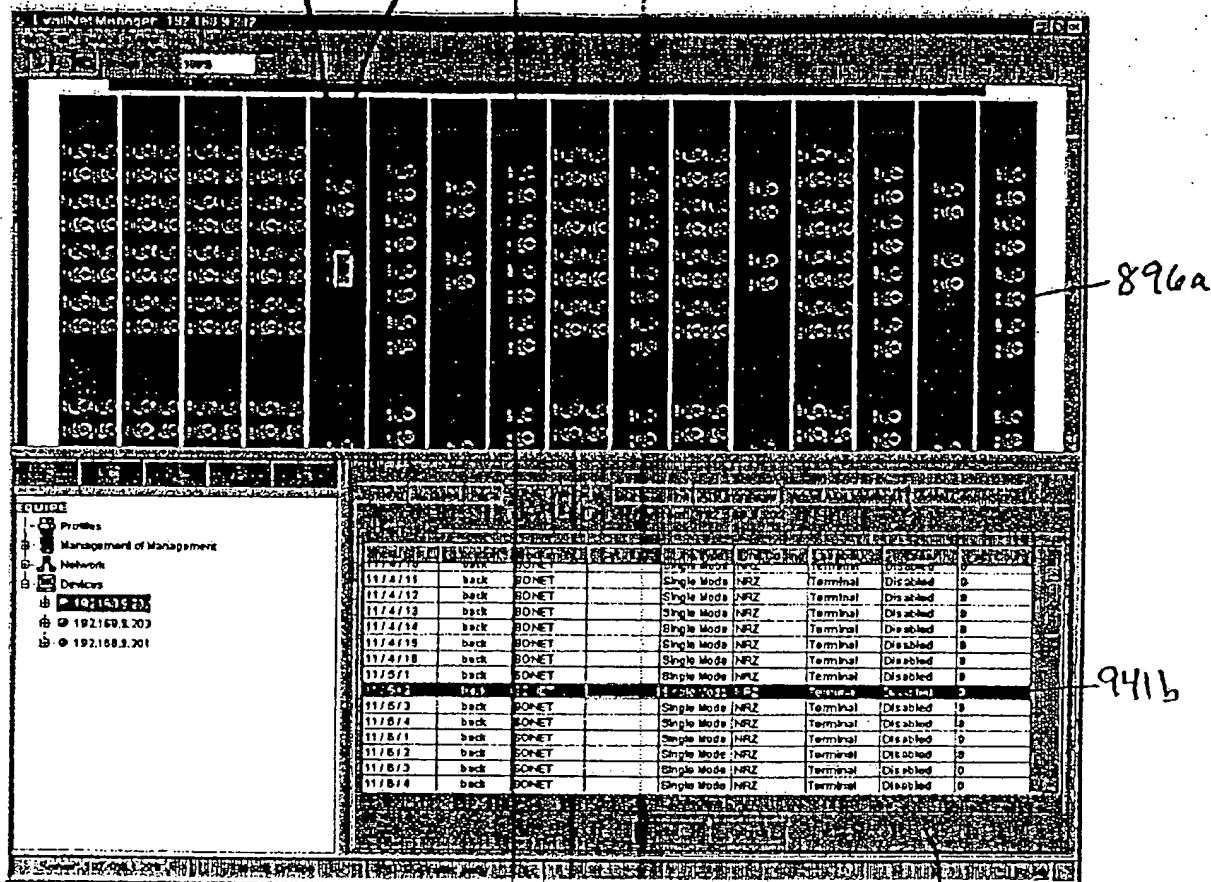


Fig. 4u





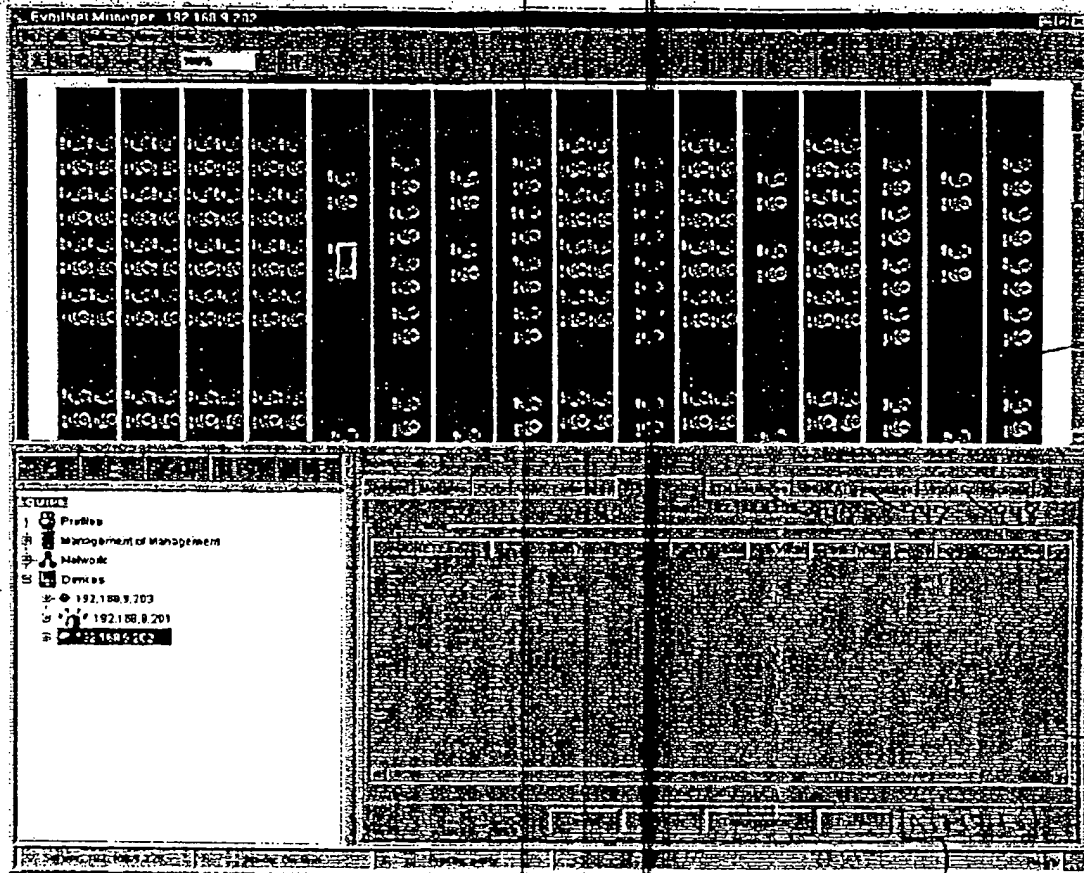


Fig. 4w

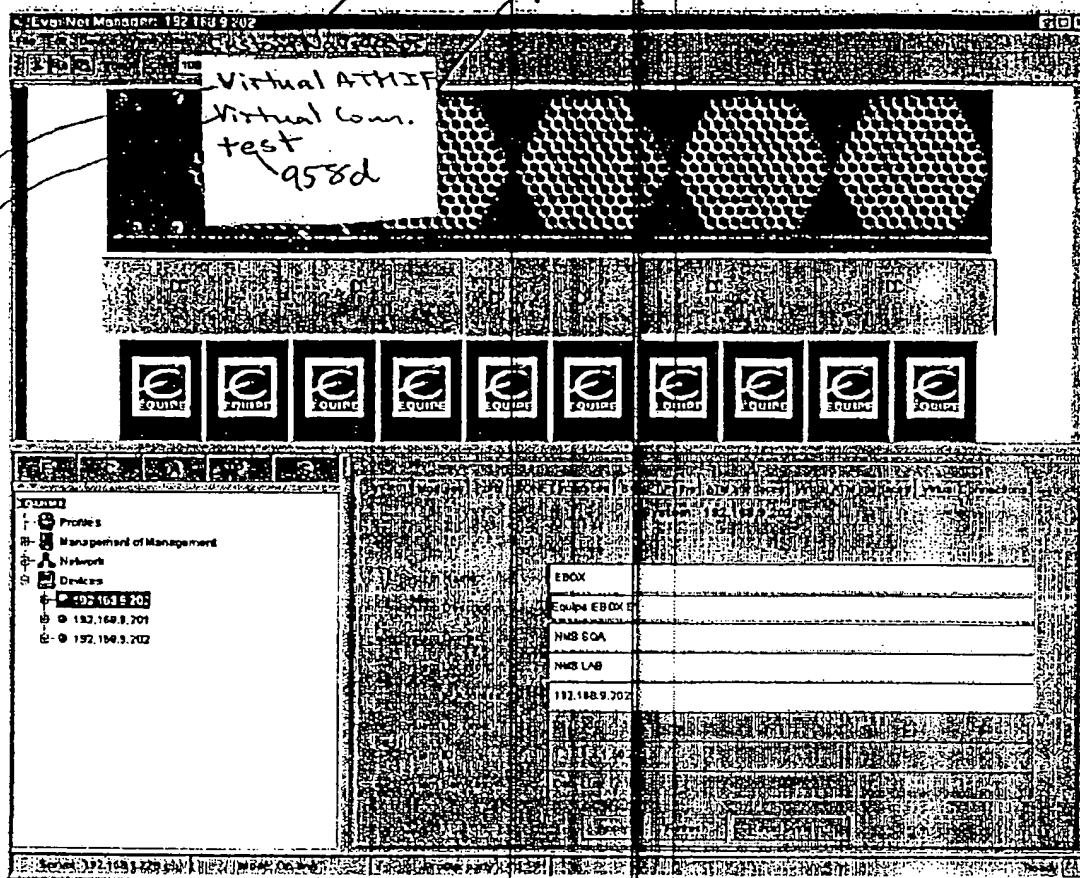


Fig. 4x

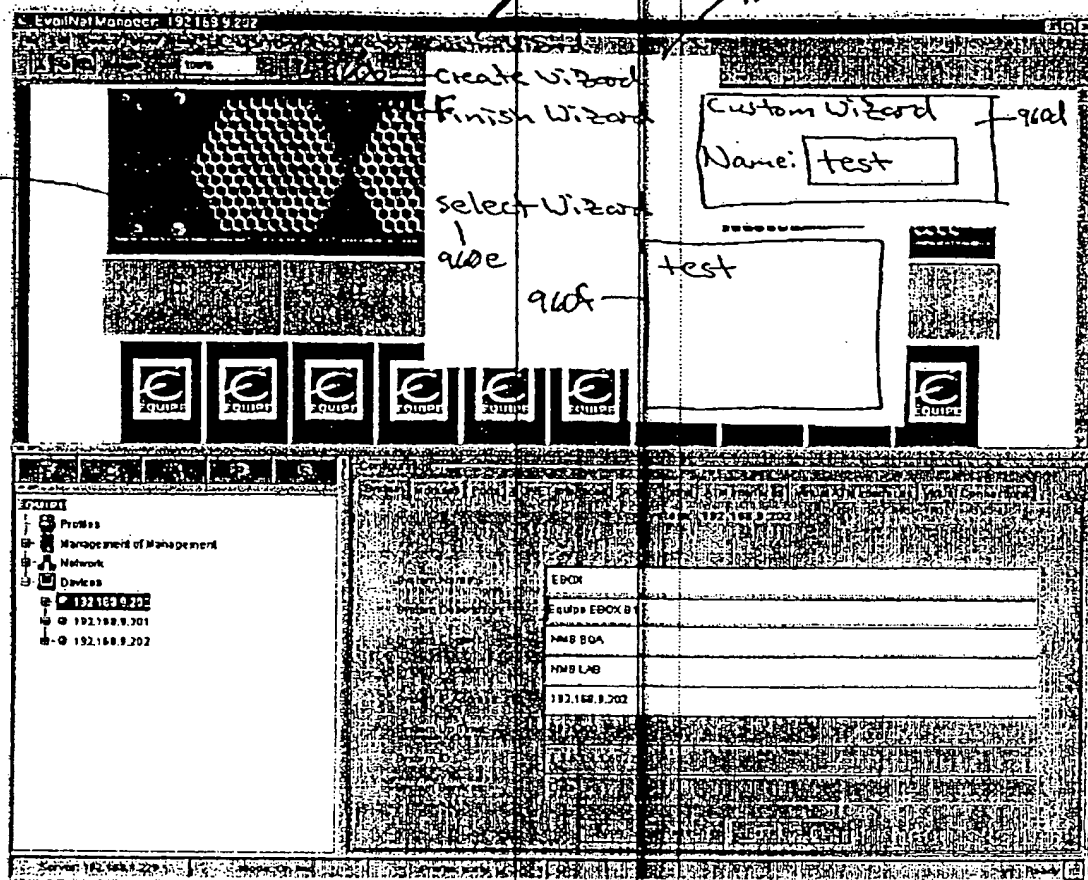


Fig. 4y

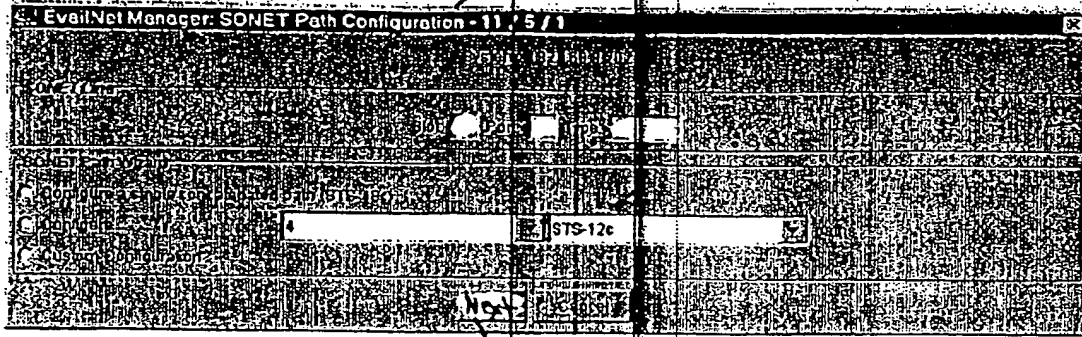


Fig. 42

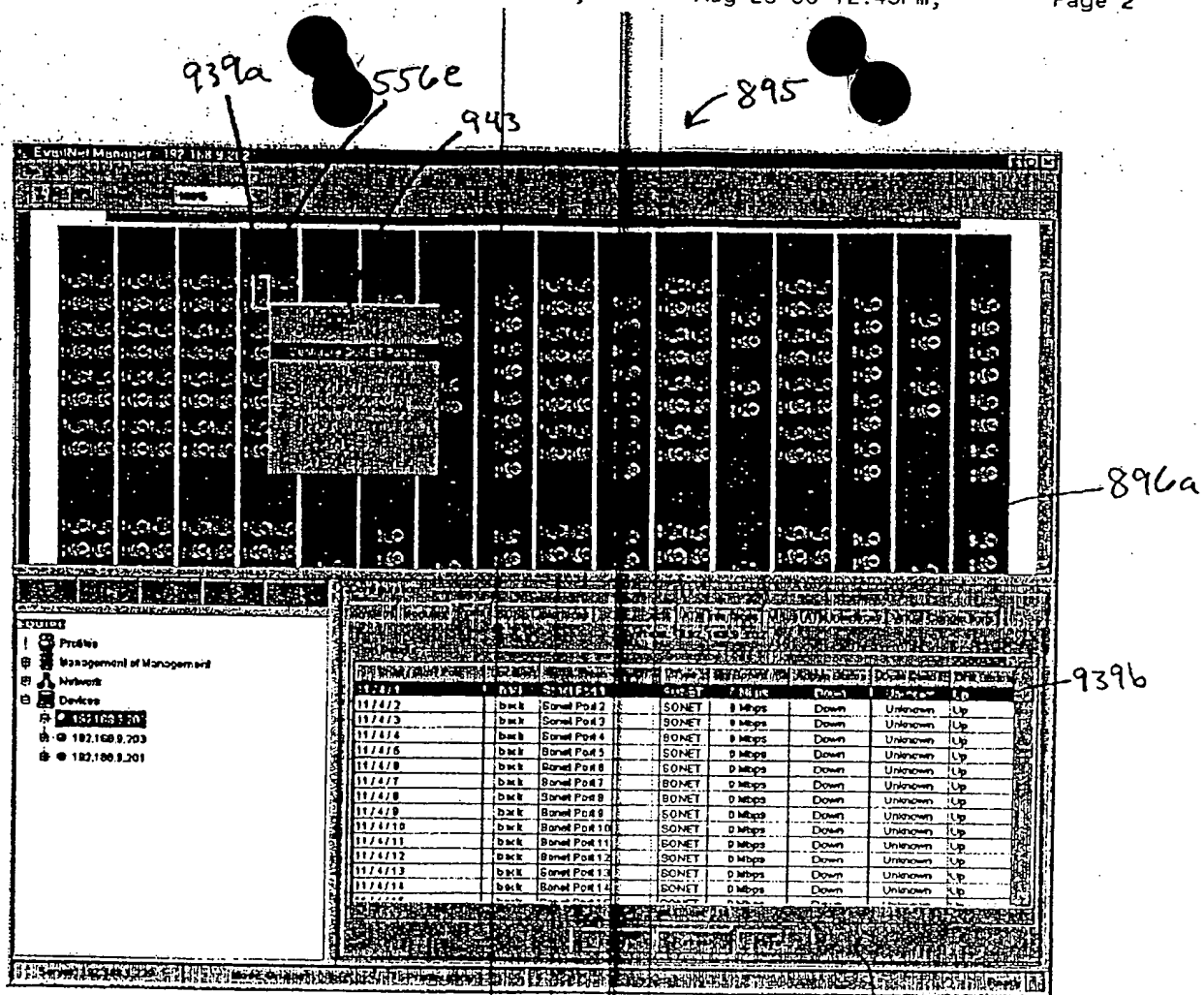


Fig. 5b

944

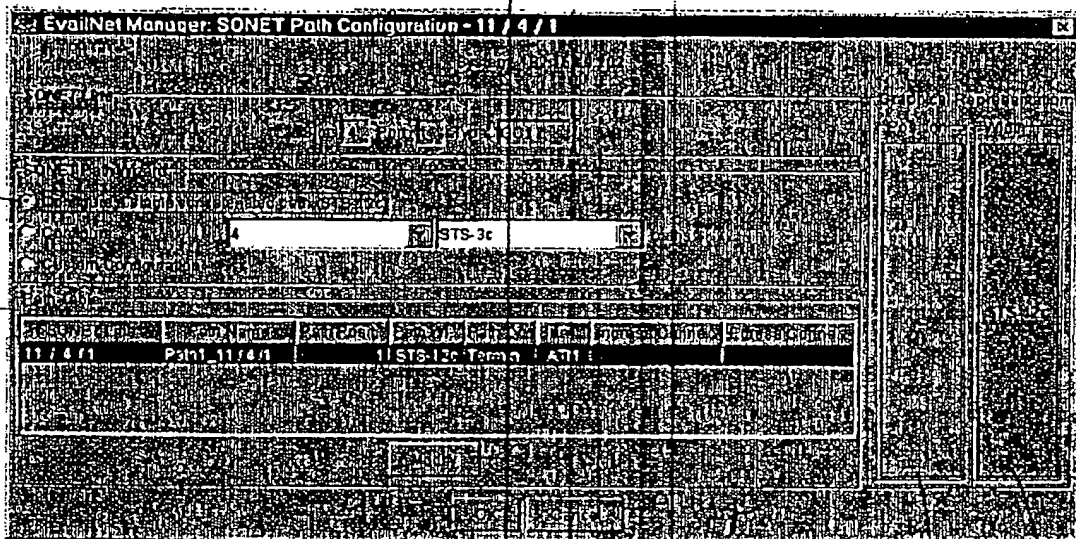
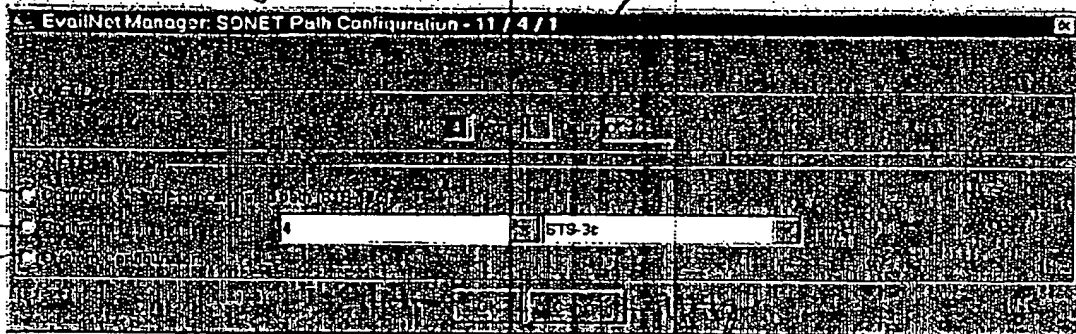


Fig. 5c

Fig. 5d

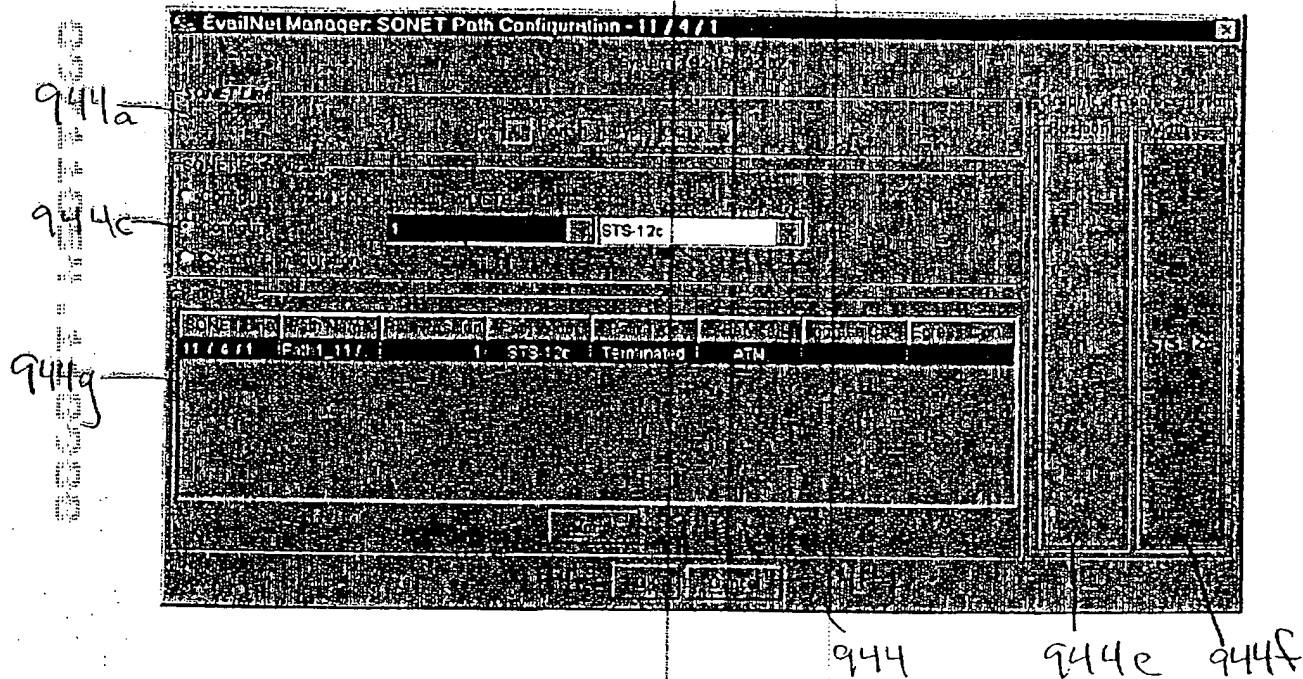
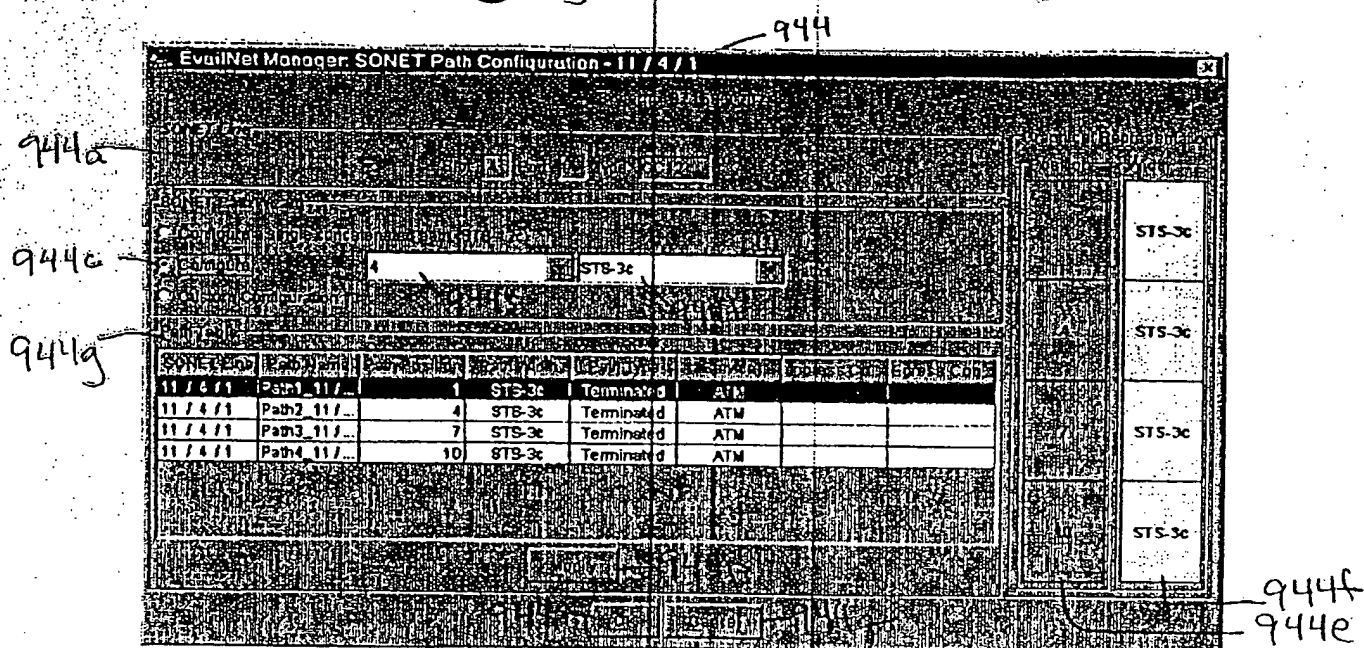


Fig. 5e



Fig. 5f

944

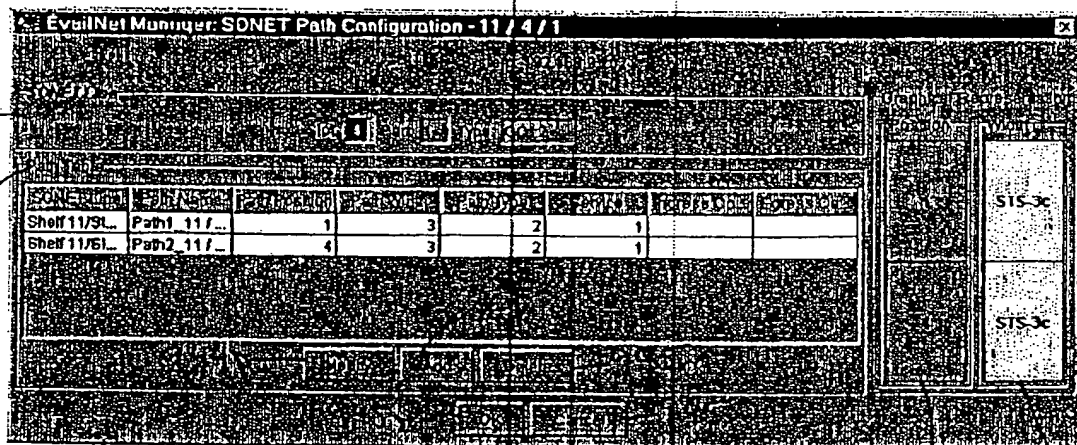
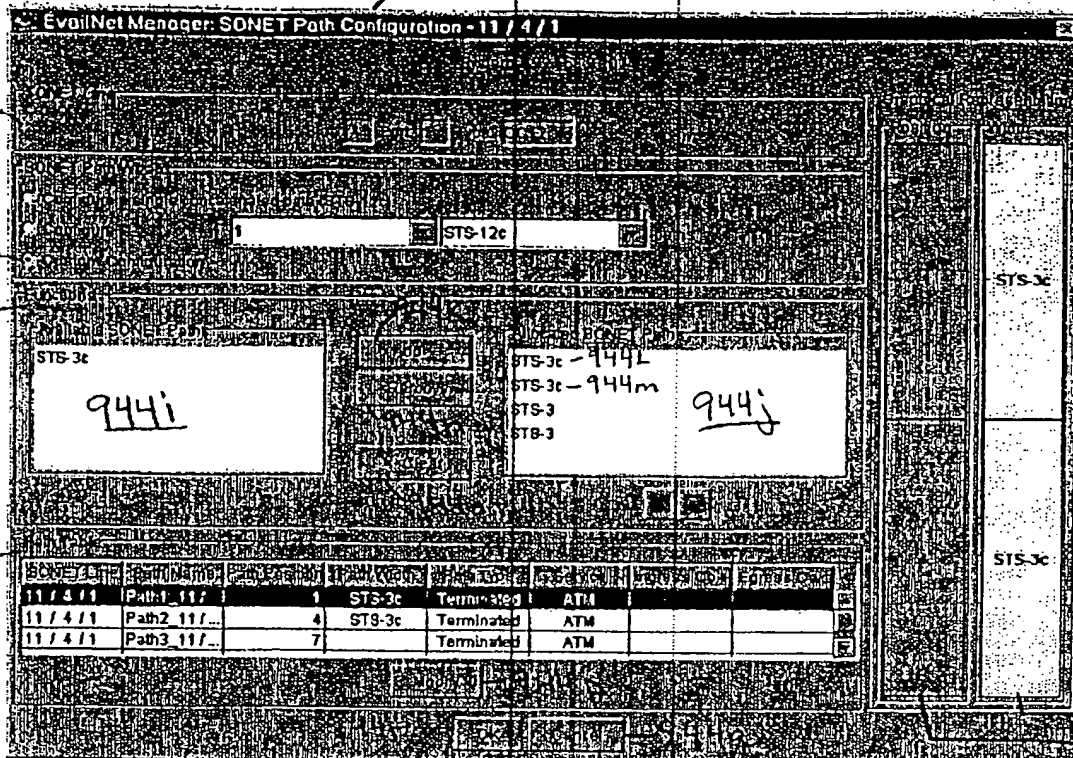


Fig. 5g

895

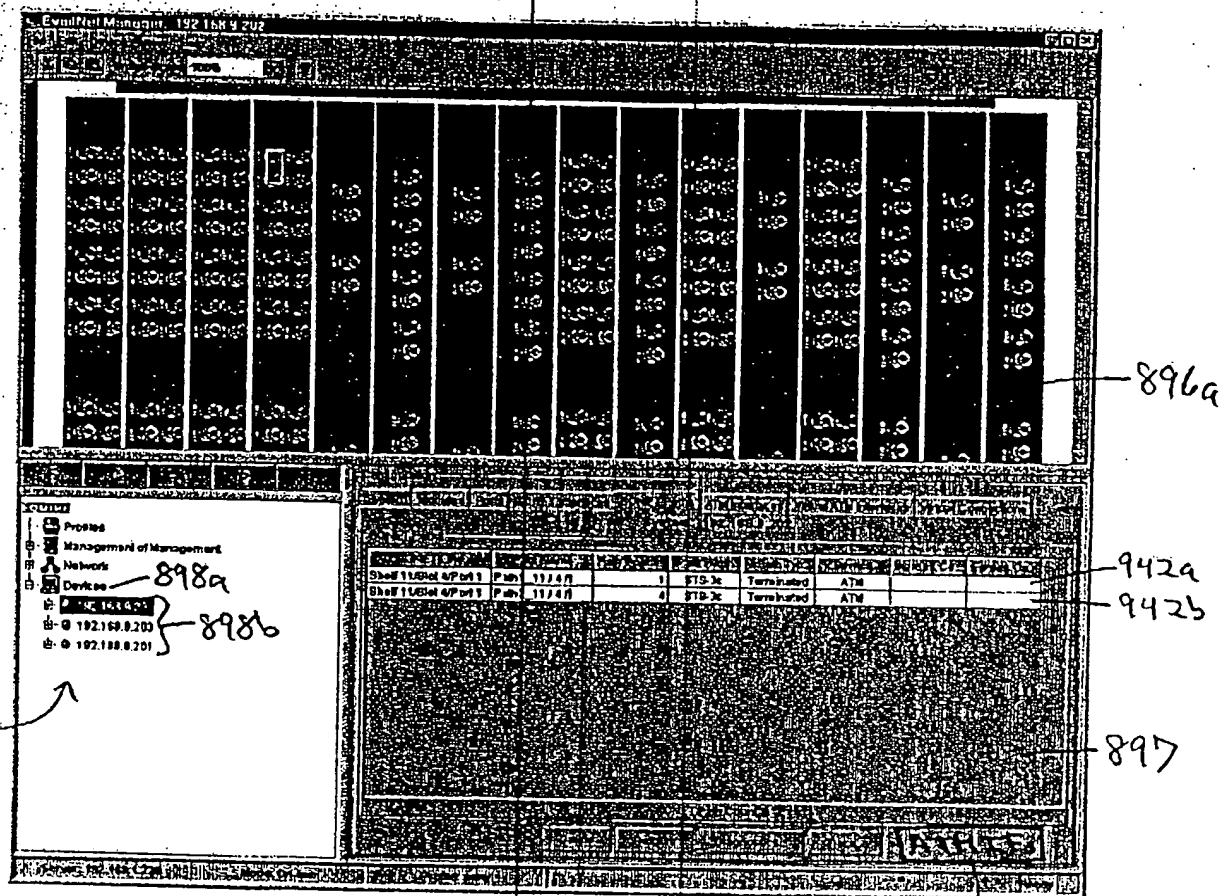
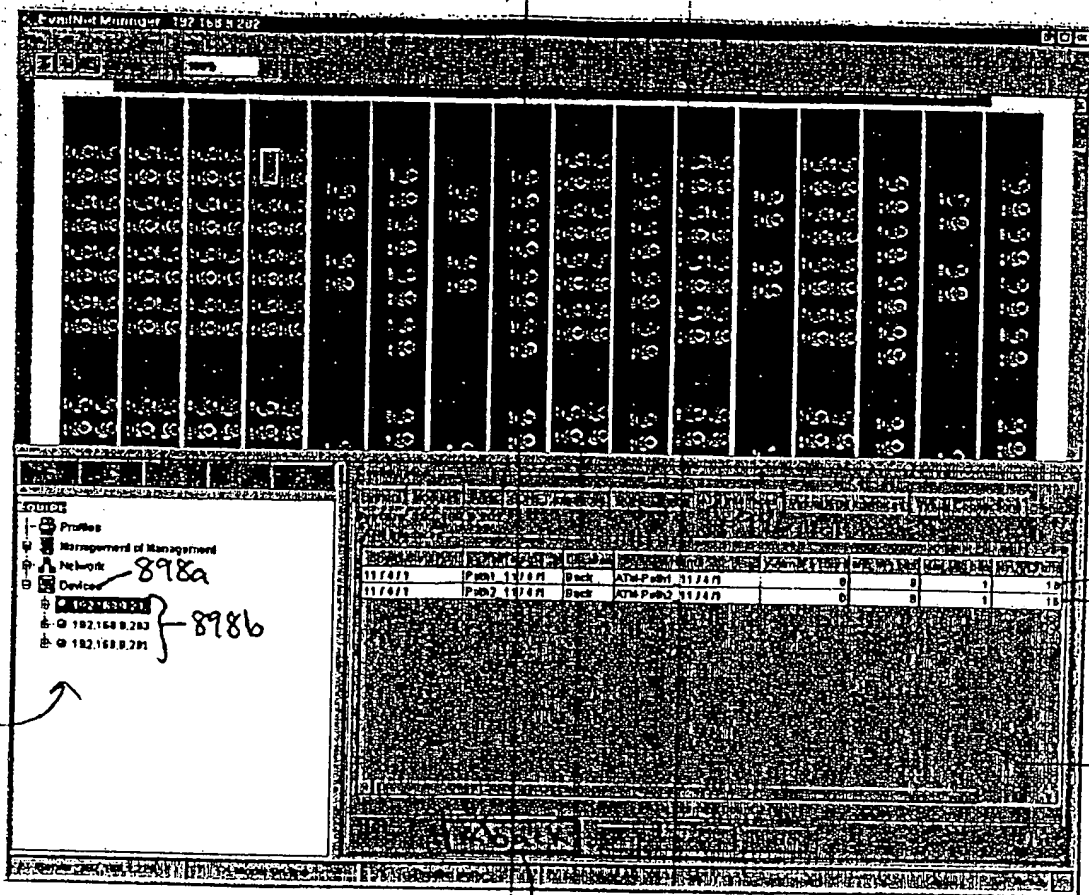


Fig. 5h

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946a  
946b

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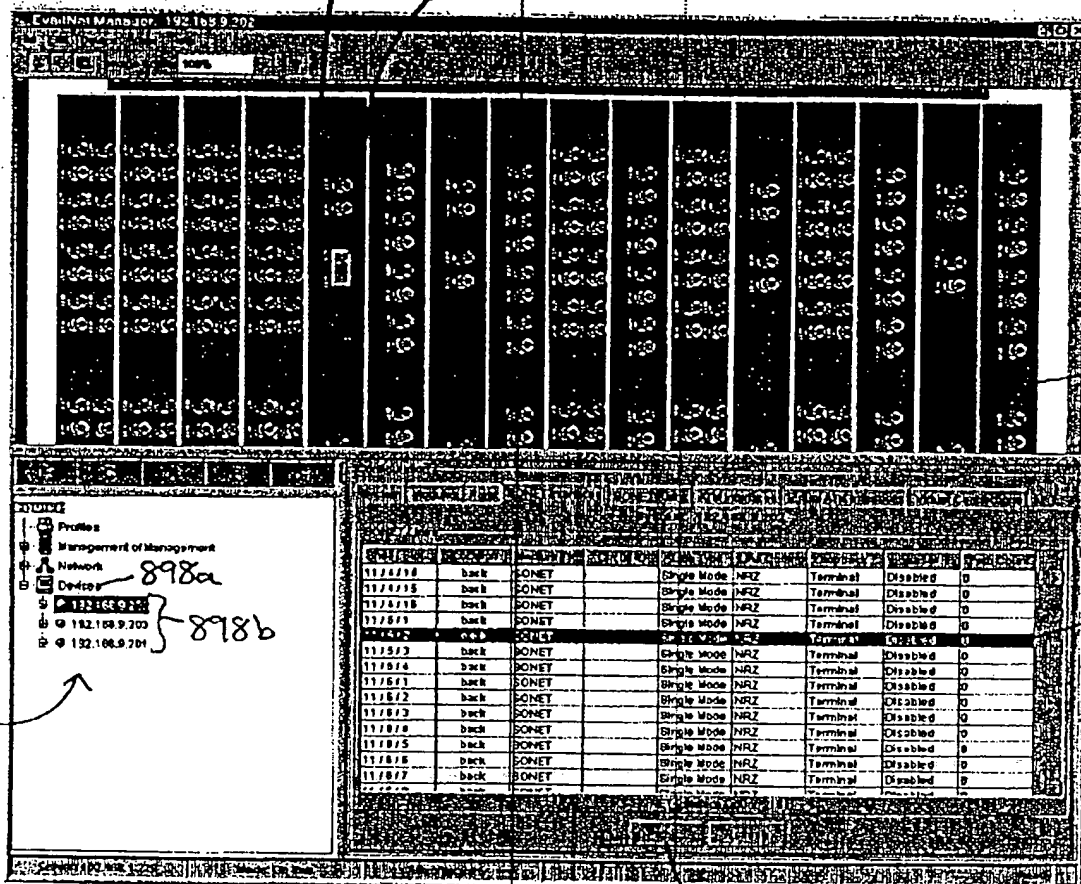
946h

Fig. 5i

Fig. 5j

Sold 1.941a

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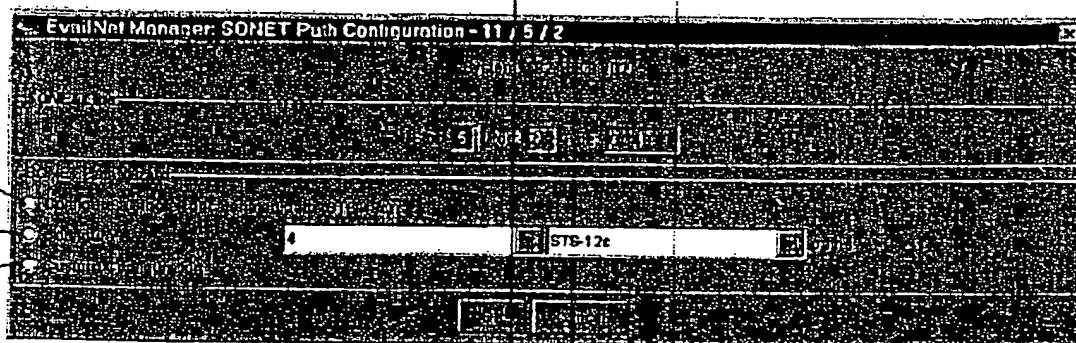


-896a

949a

9400

Fig. 5K



-944a

944

Fig. 5m

944

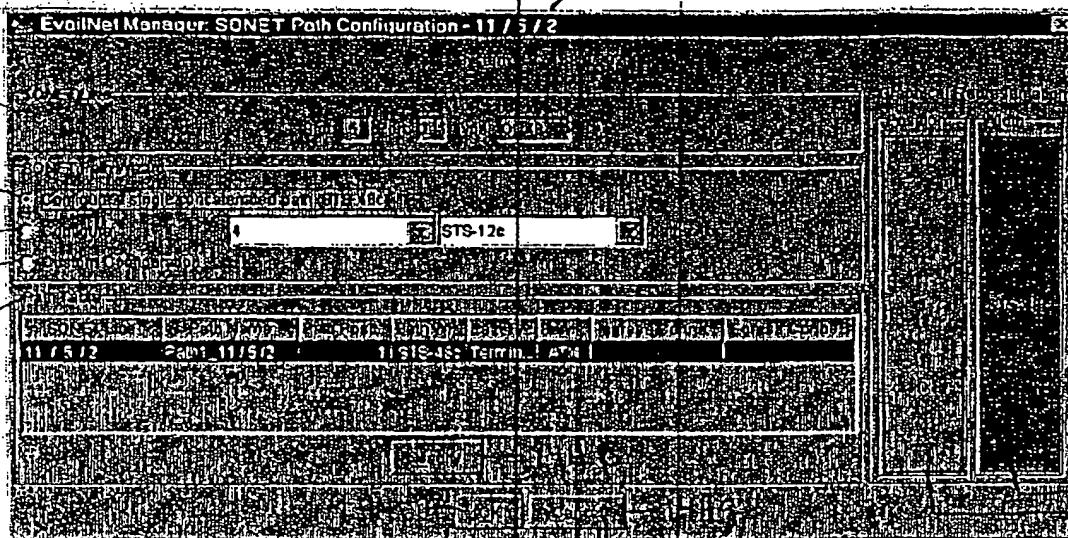
944a

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944c

944d

944g



944f

944e

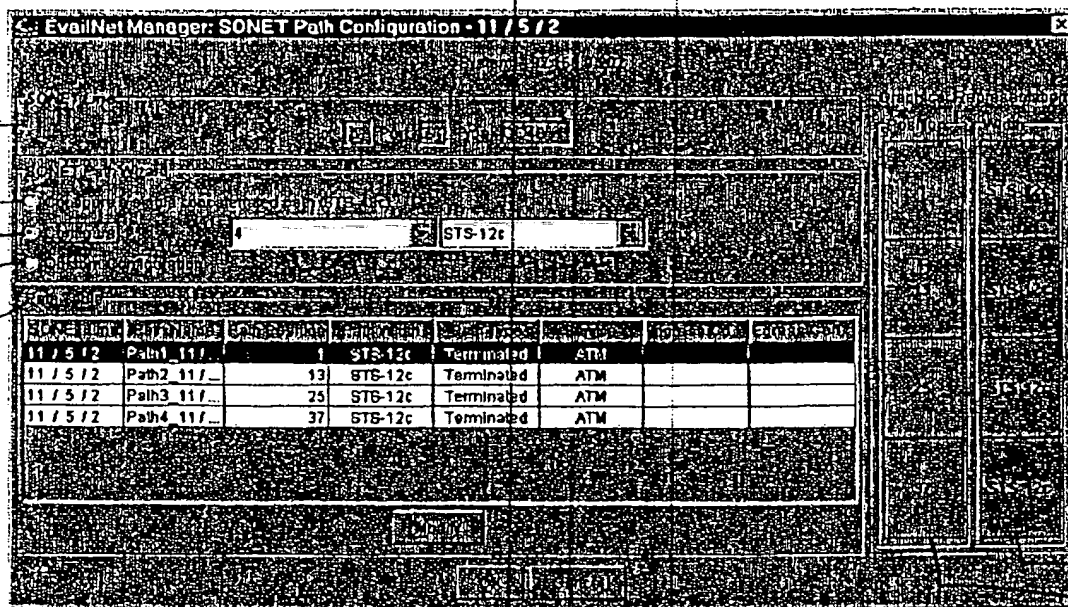
944a

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944d

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944f

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Fig. 5m

II 5n

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The screenshot displays the 'SONET Path Configuration' window for path 11/5/2. The path is defined by a sequence of nodes: STB-48c, 9445, and ATM. The path is labeled '11/5/2 Path: 11/5/2' and '1: STB-48c | Terminate: ATM'. The path is also labeled '11/5/2' and '1: STB-48c | Terminate: ATM'.

[illegible]

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Fig. 50

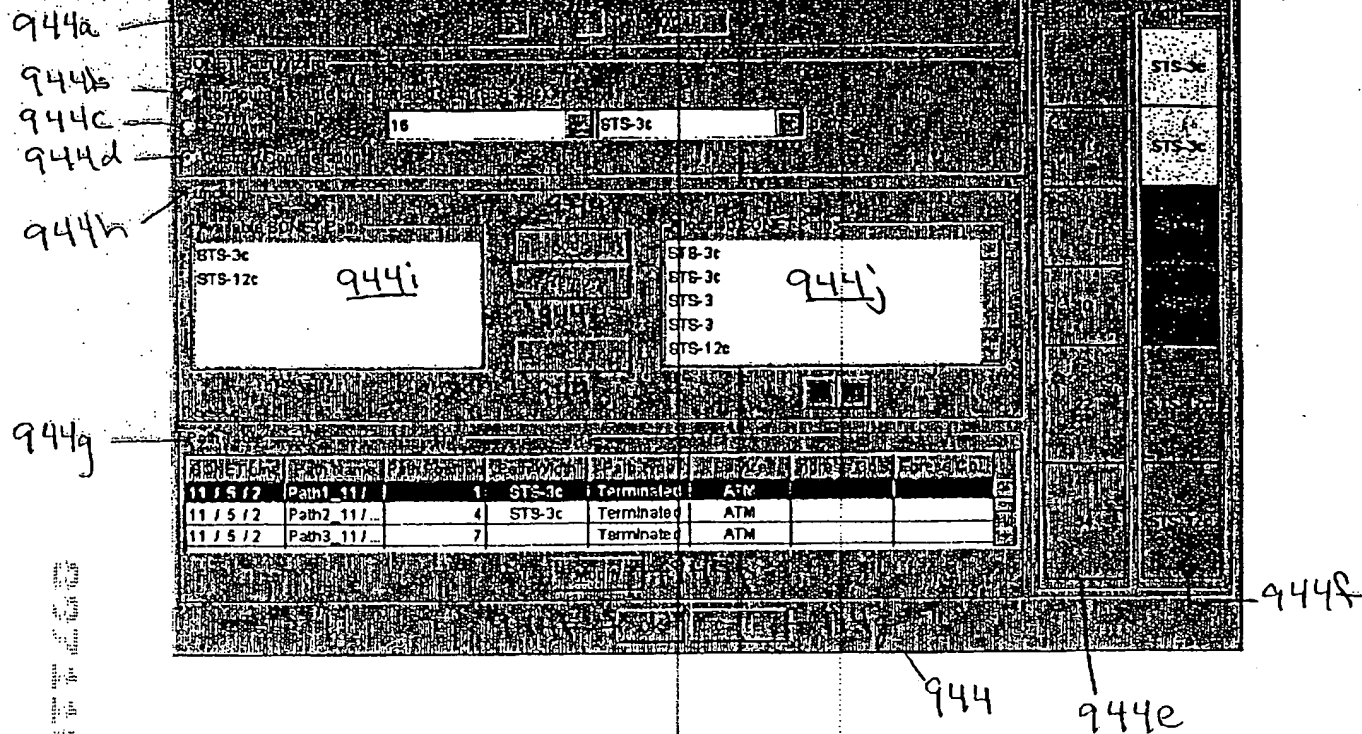


Fig. 5p



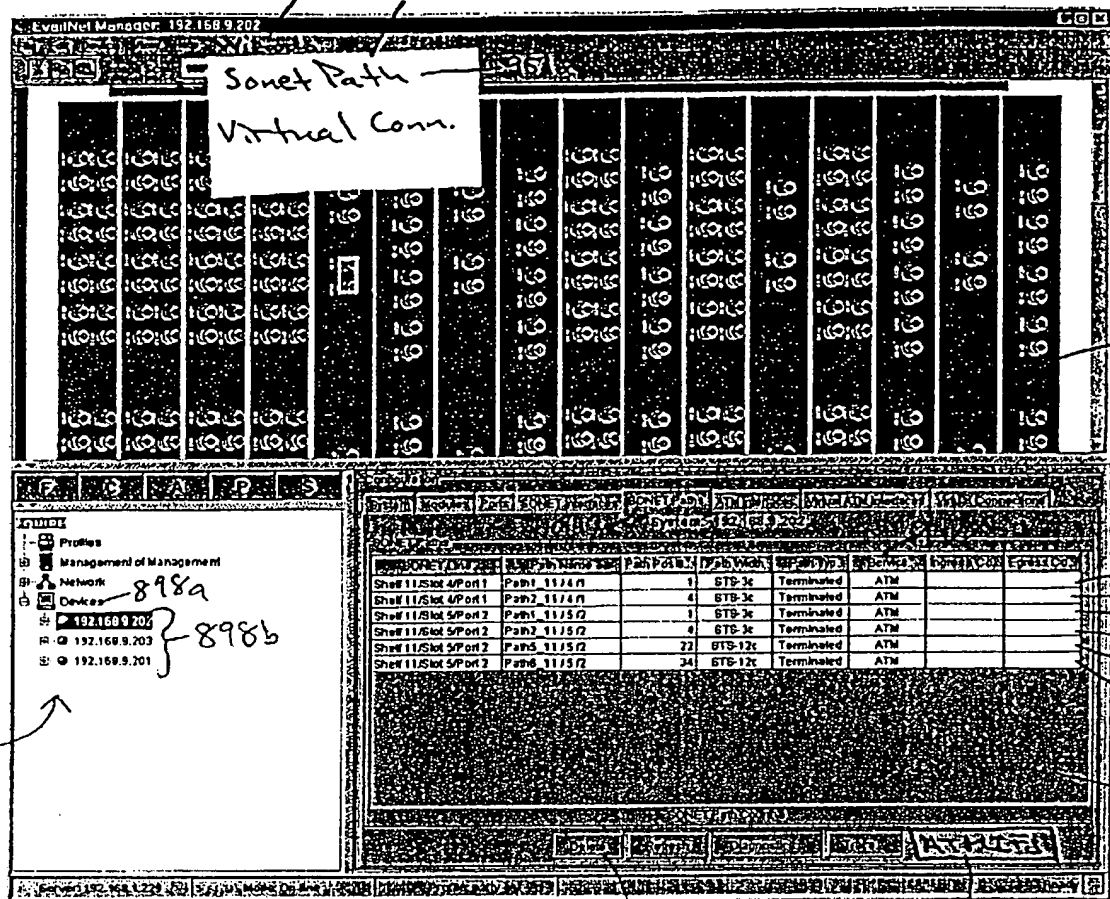


Fig. 5g



✓ 89 | 5

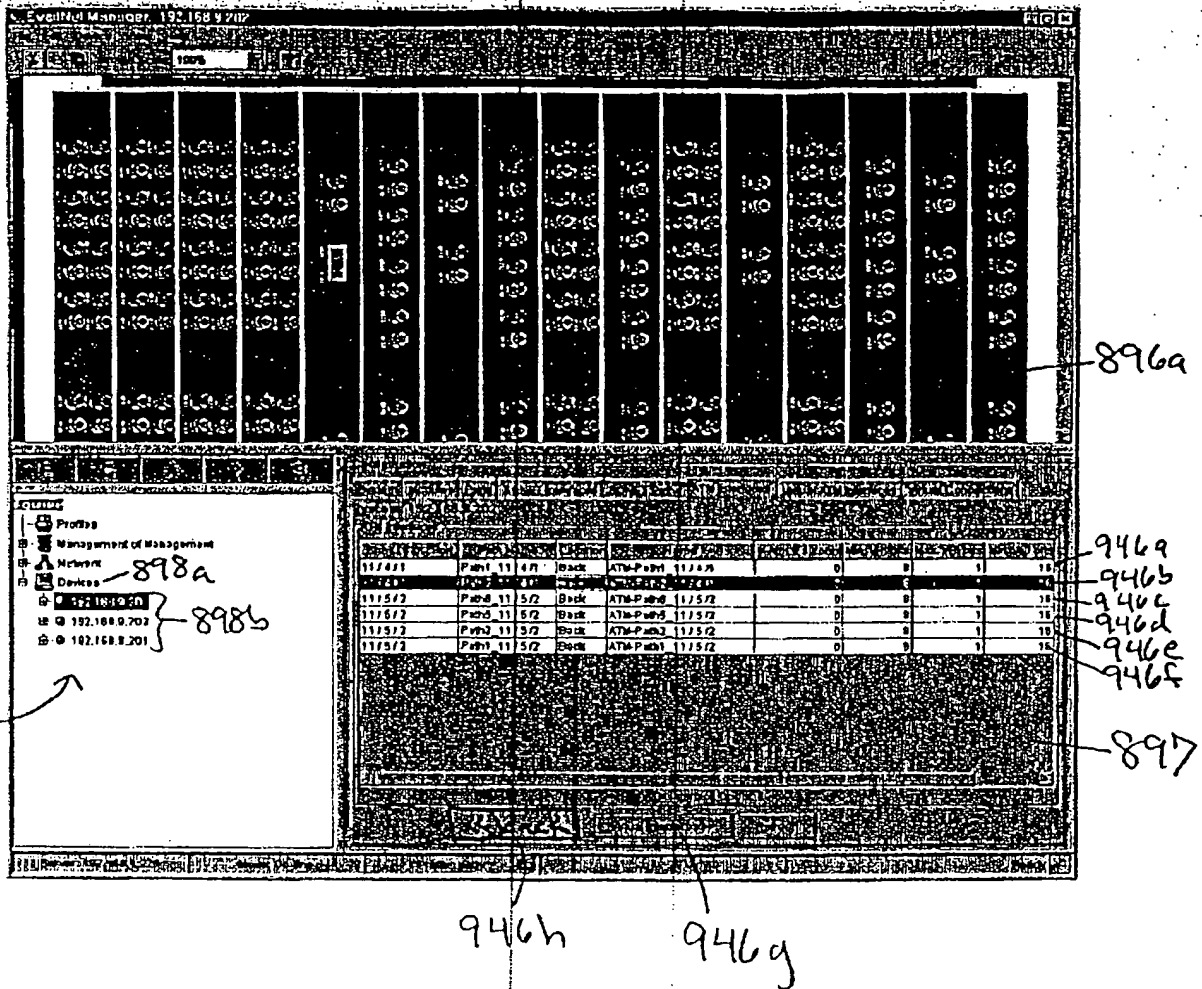
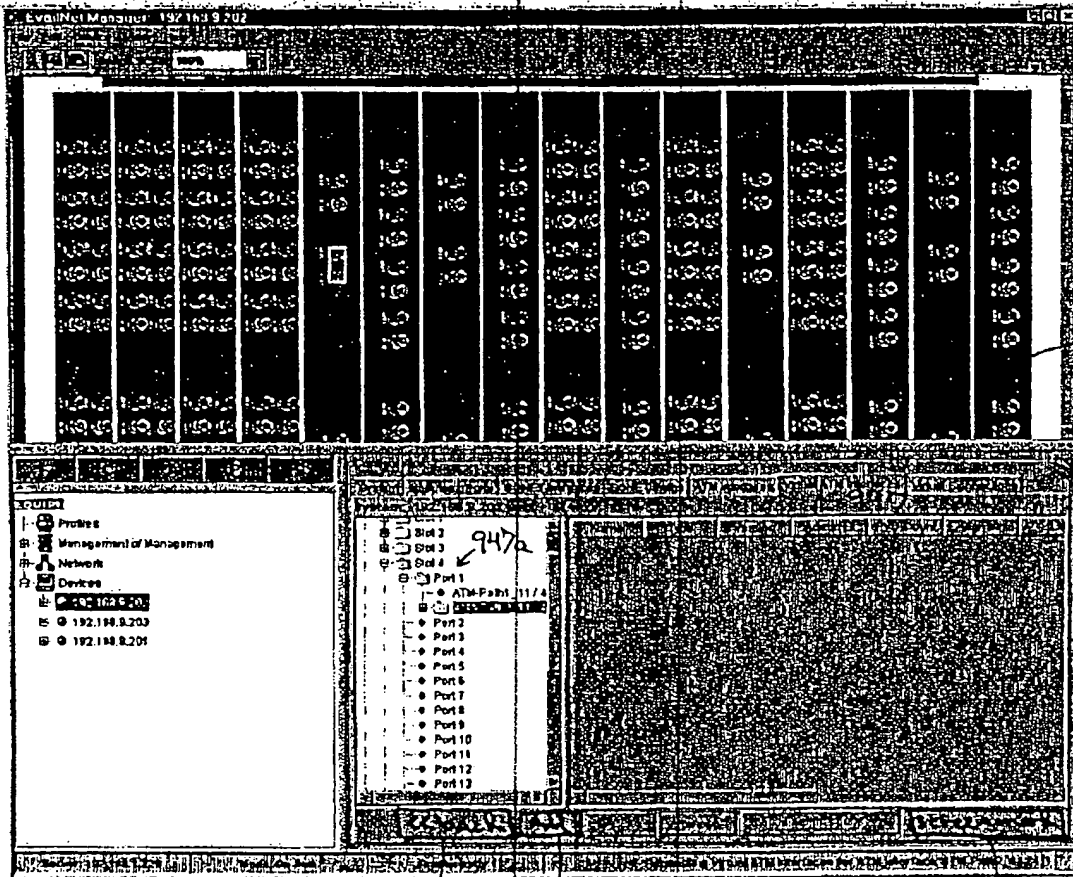


Fig. 5

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896a

9472d

947b

959

Fig. 5s

950

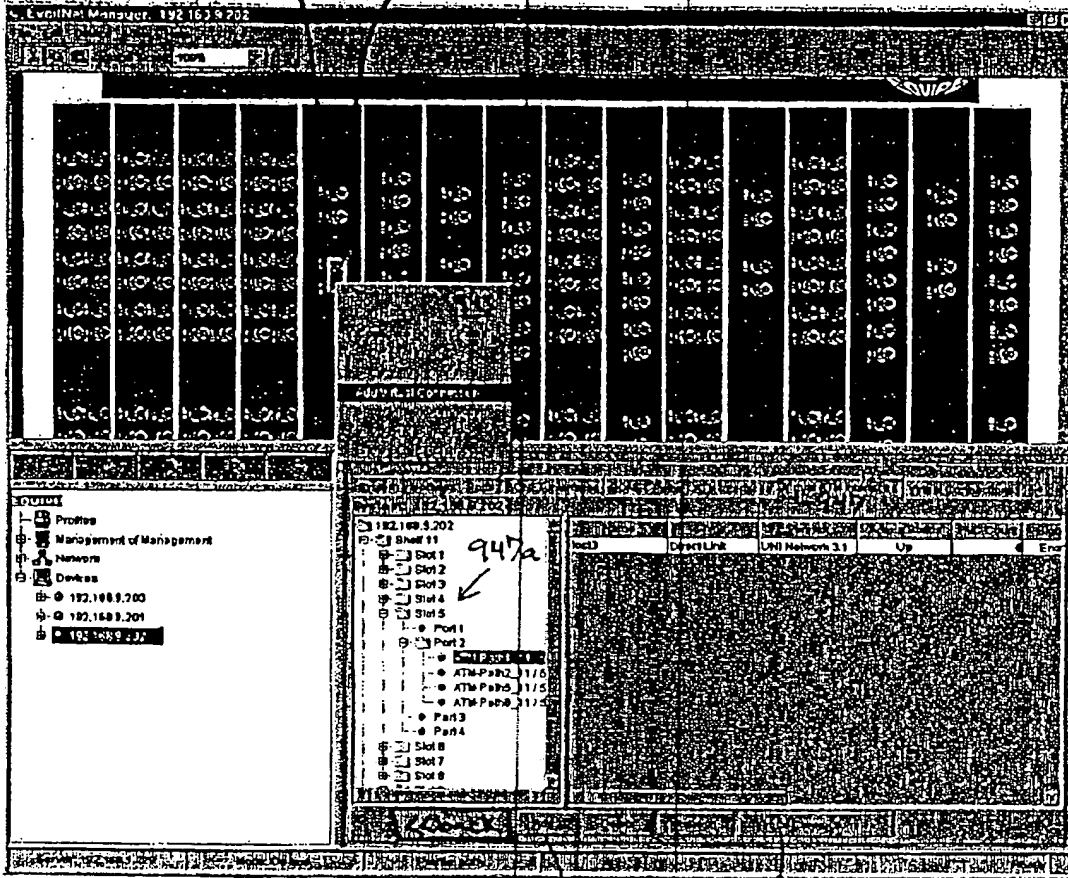
950c

9476

Fig. 5u

556a 941a

← 895



947b

947d

947c

Fig. 5v

952

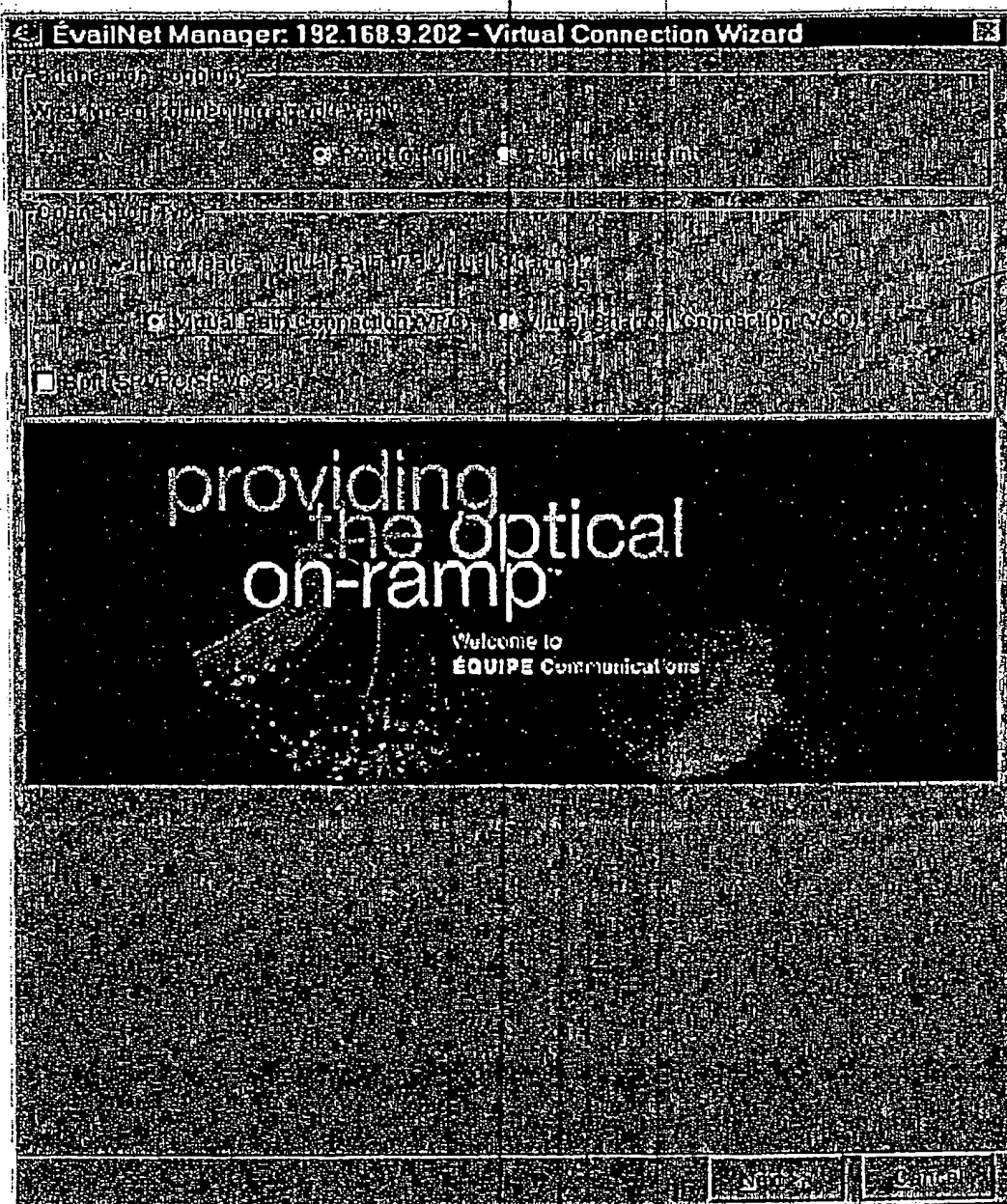


Fig. 5w

EvailNet Manager: 192.168.9.202 - Virtual Connection Wizard

Source: 192.168.9.202 Destination: 192.168.9.100

Slot 4

- Port 1
  - ATM-Path1\_11/4/1
    - test1
    - test2
  - Port 2
  - Port 3
  - Port 4

Slot 3

- Slot 4
- Slot 5
- Port 1
- Port 2
  - ATM-Path1\_11/5/2
    - test3
  - ATM-Path2\_11/5/2
  - ATM-Path5\_11/5/2

Connection Parameters

Connection Name: test

Admin: Up

Customer Name: Walmart

Sub-Port Parameters

Port: 953i

Port: 953m

Transmit Traffic Description: VBR-high

Receive Traffic Description: VBR-high

Use the same Traffic Description for both Transmit and Receive

Sub-Port Parameters

Port: 953j

Port: 953n

Transmit Traffic Description: VBR-high

Receive Traffic Description: VBR-high

Use the same Traffic Description for both Transmit and Receive

Buttons: Back, Finish, Cancel

Fig. 5x

958

### New Traffic Descriptor

Name:

QoS Class:  ▼

Type:  ▼

Fig. 5Y

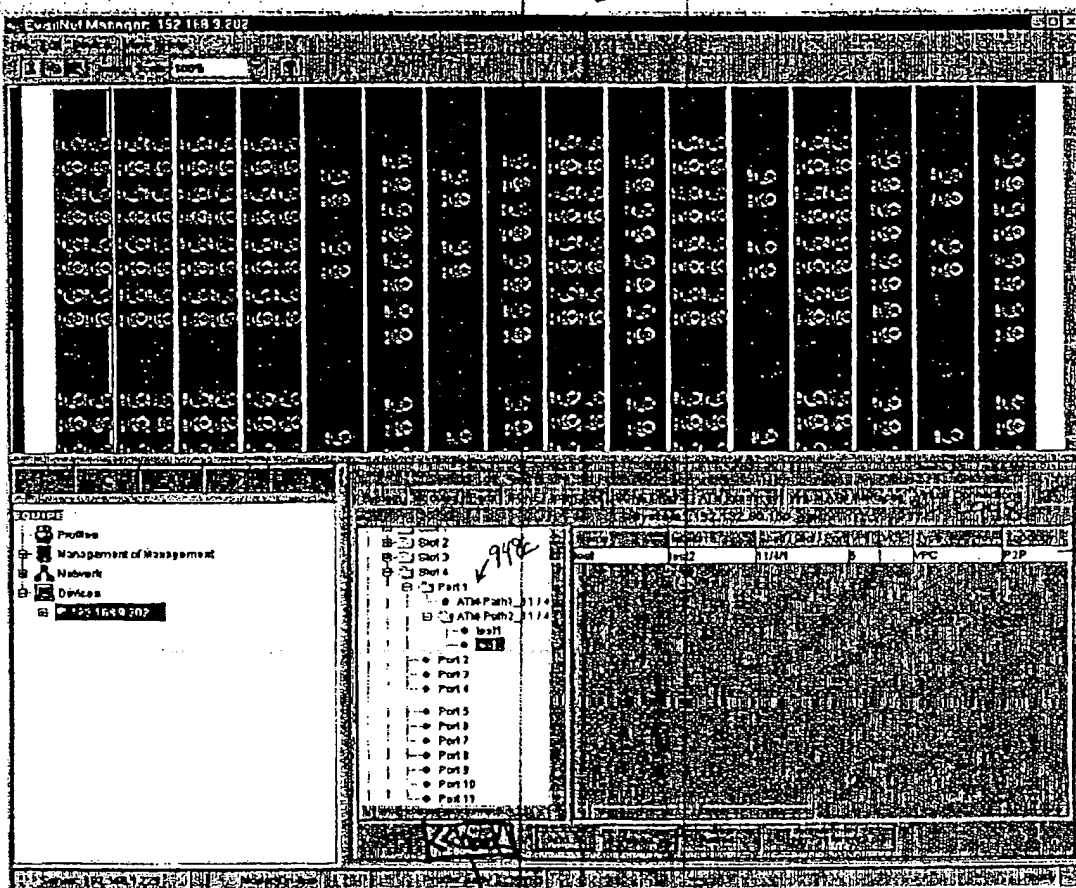


Fig. 57



895

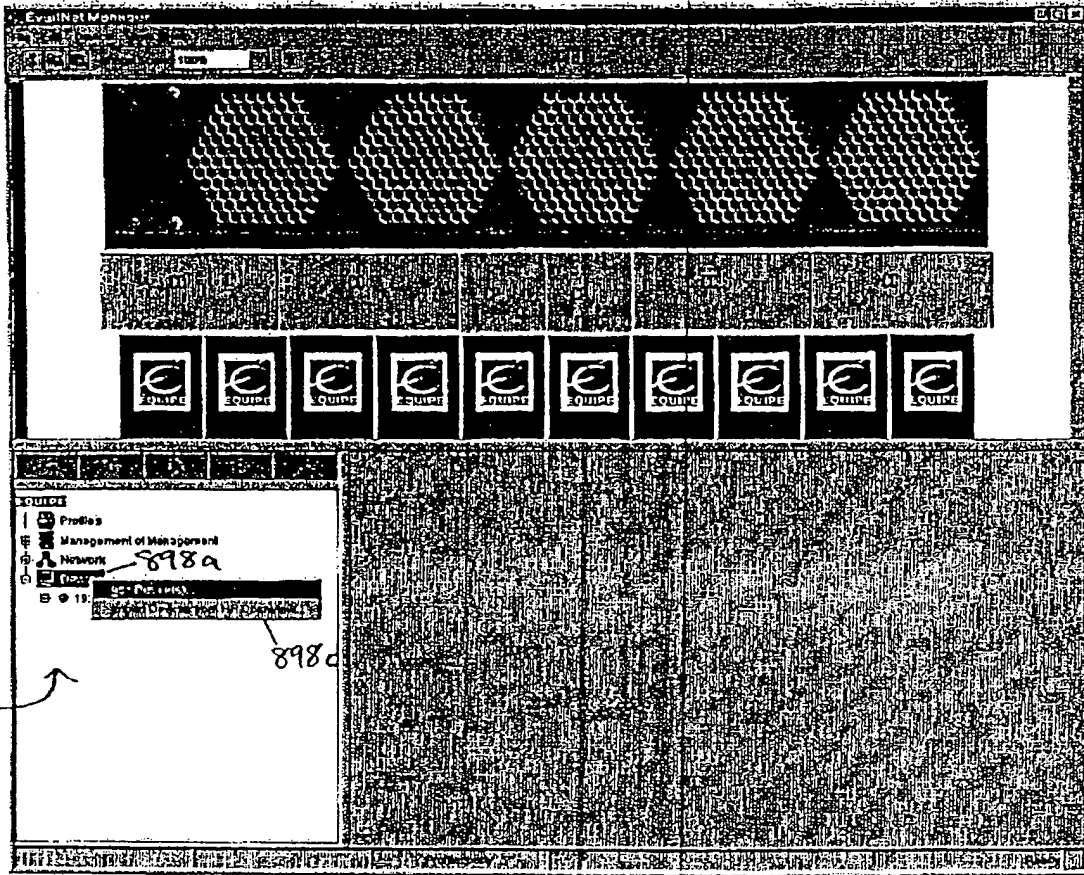
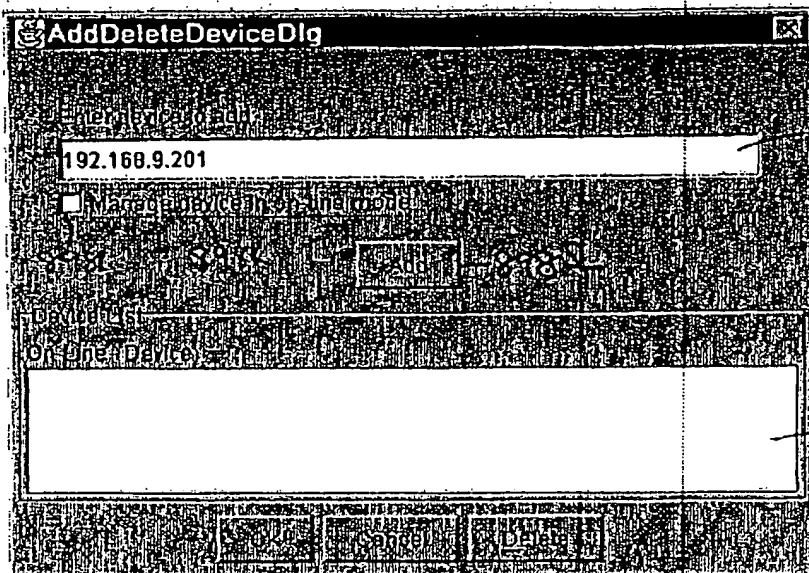


Fig. 6a

Fig. 6

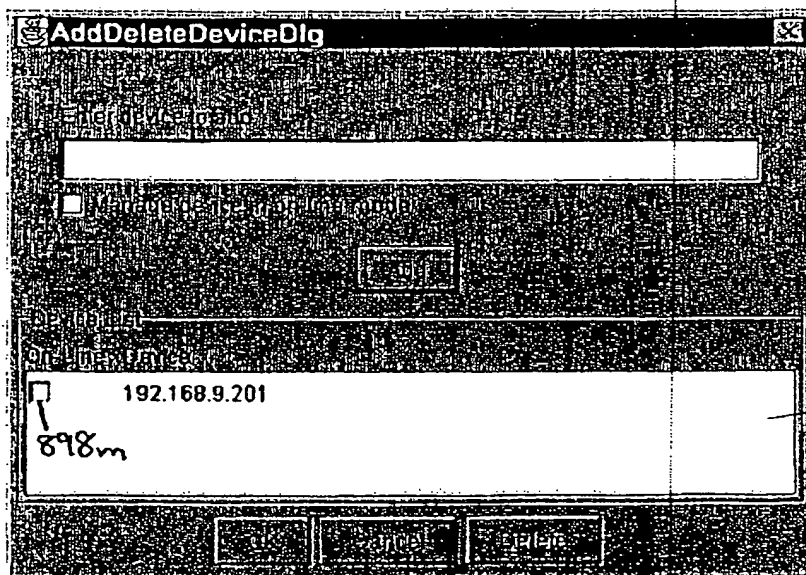


898e

898d

898g

Fig. 6c



898d

898g

895

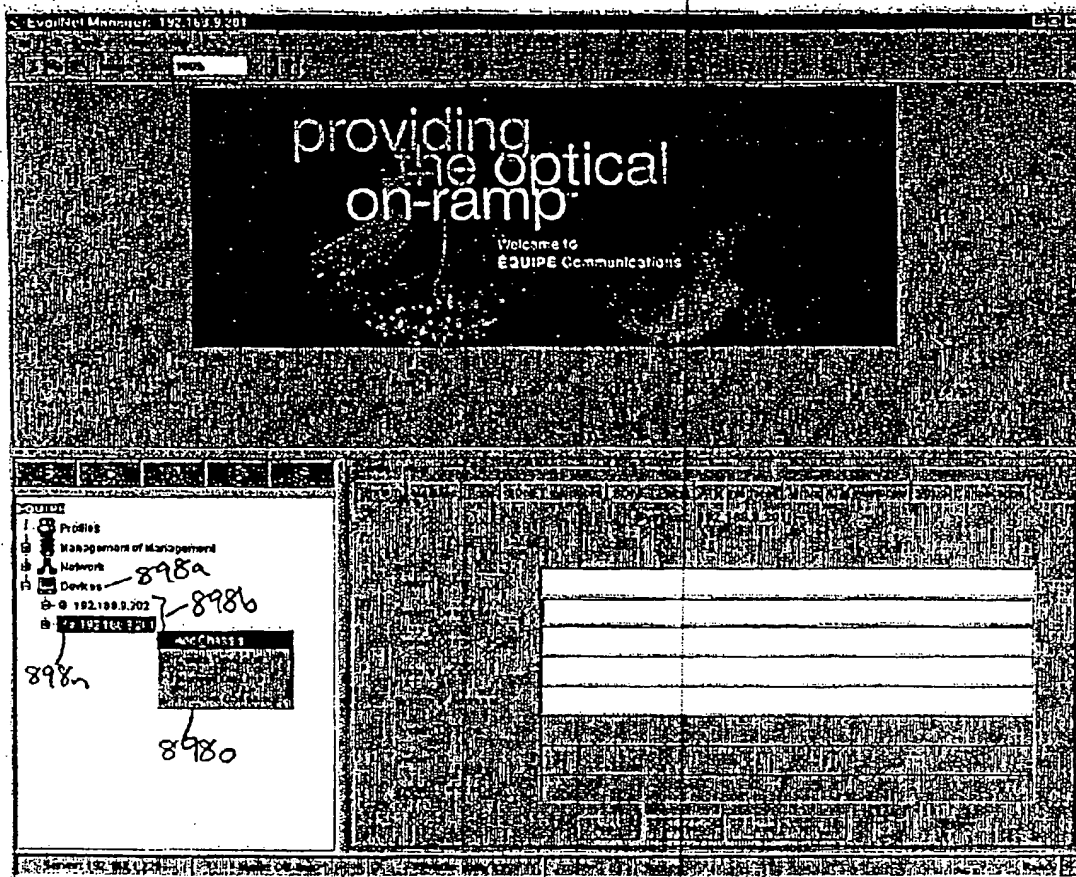


Fig. 6d

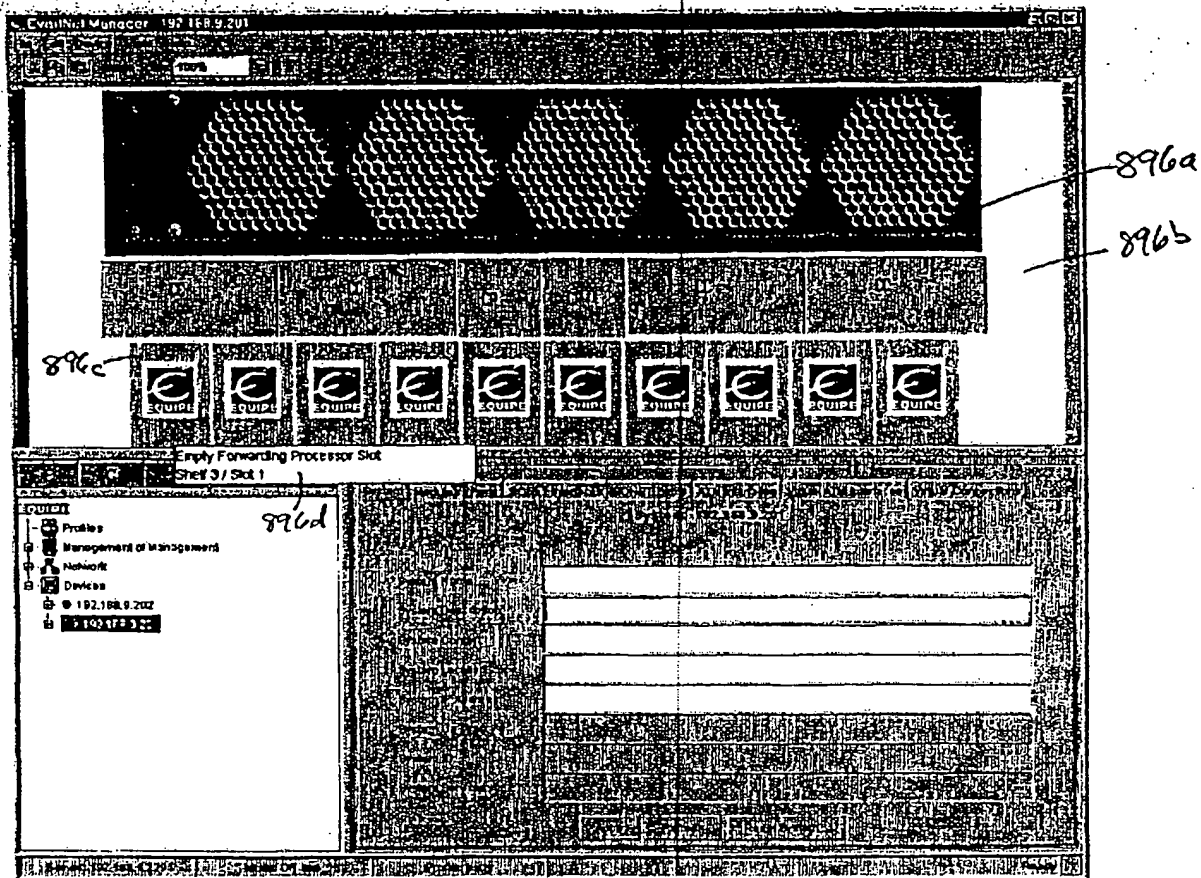


Fig. 6e

895

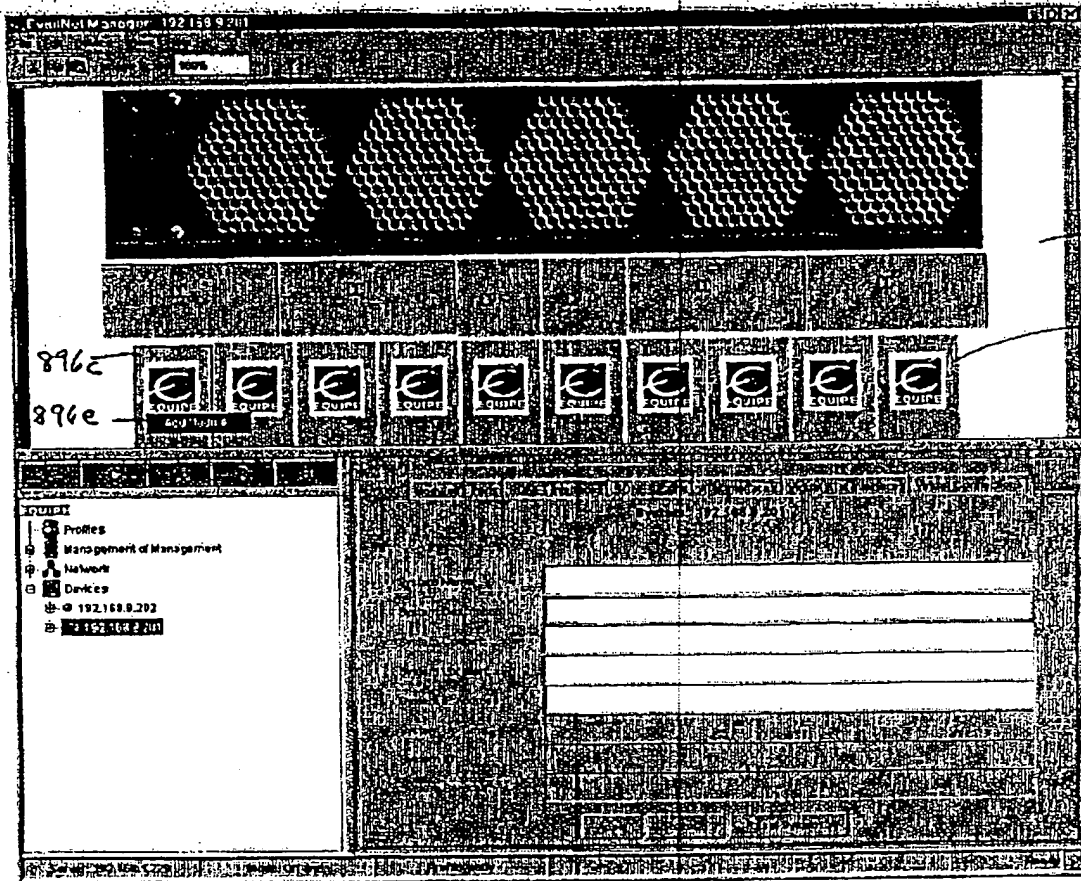


Fig. 6f

895

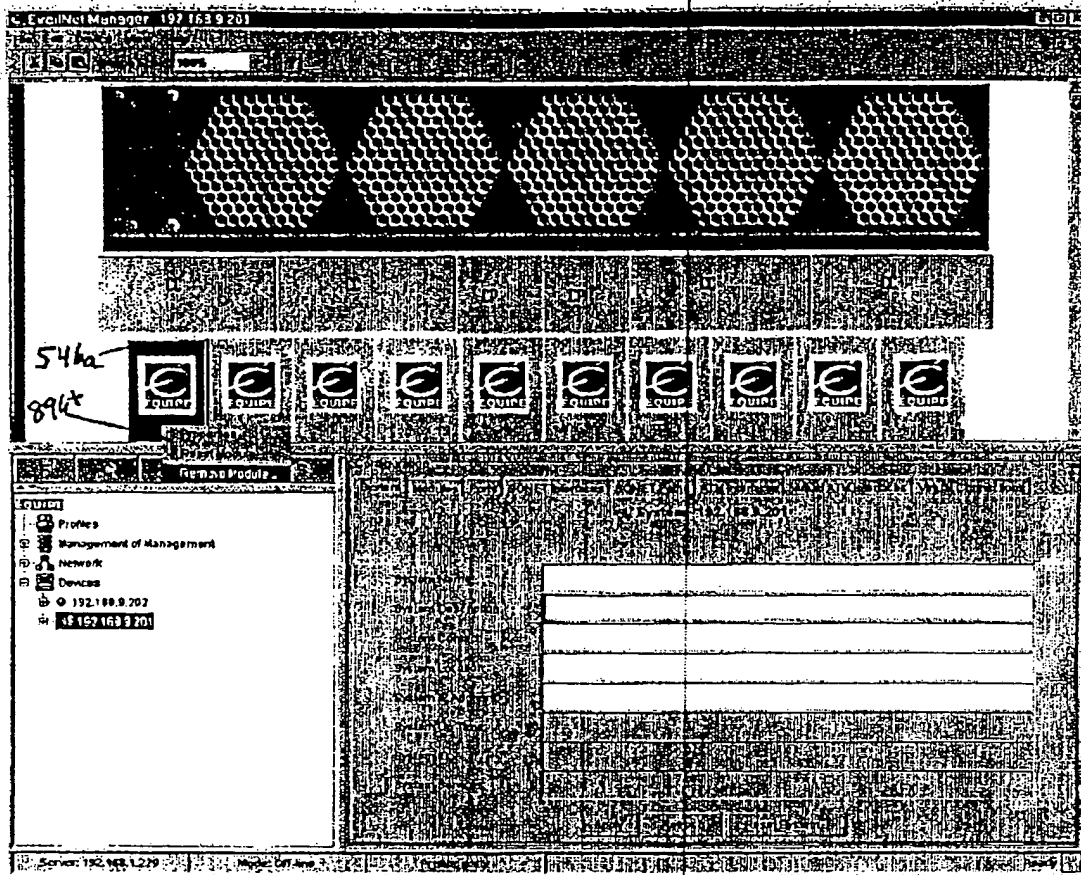


Fig. 69

895

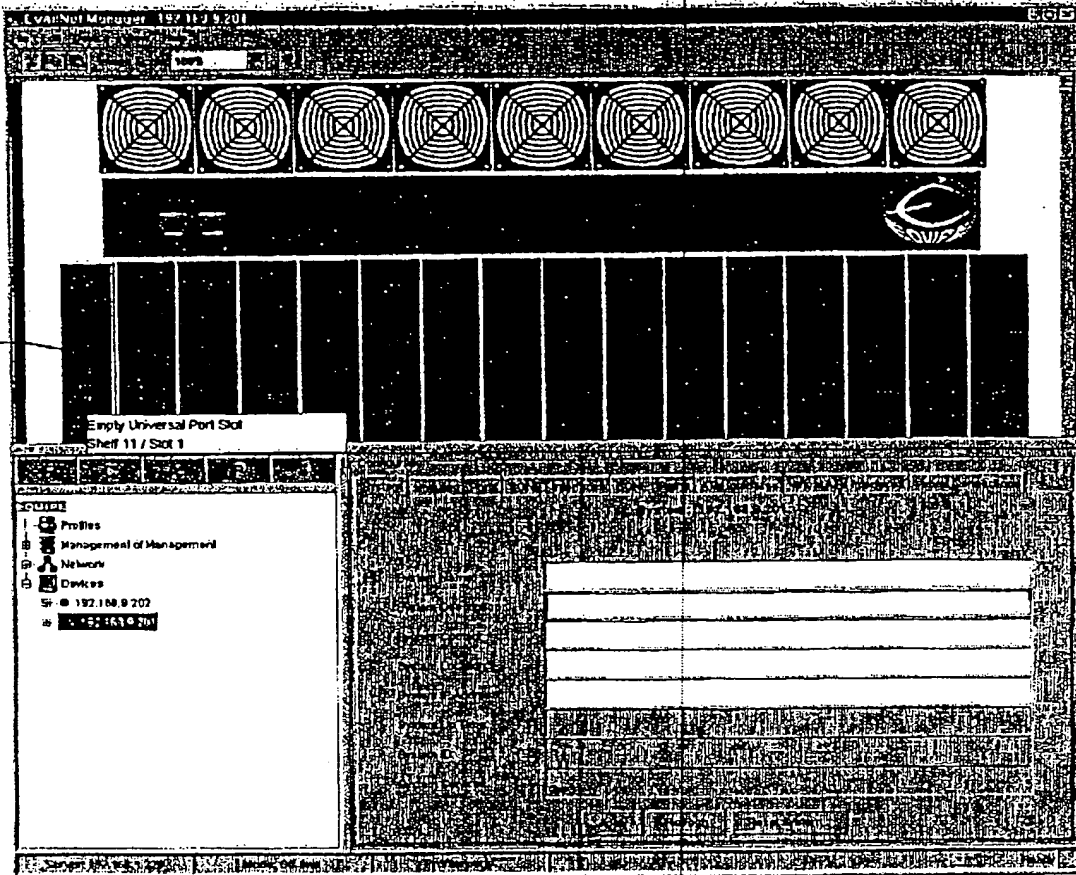


Fig. 6h

895

896f

896g

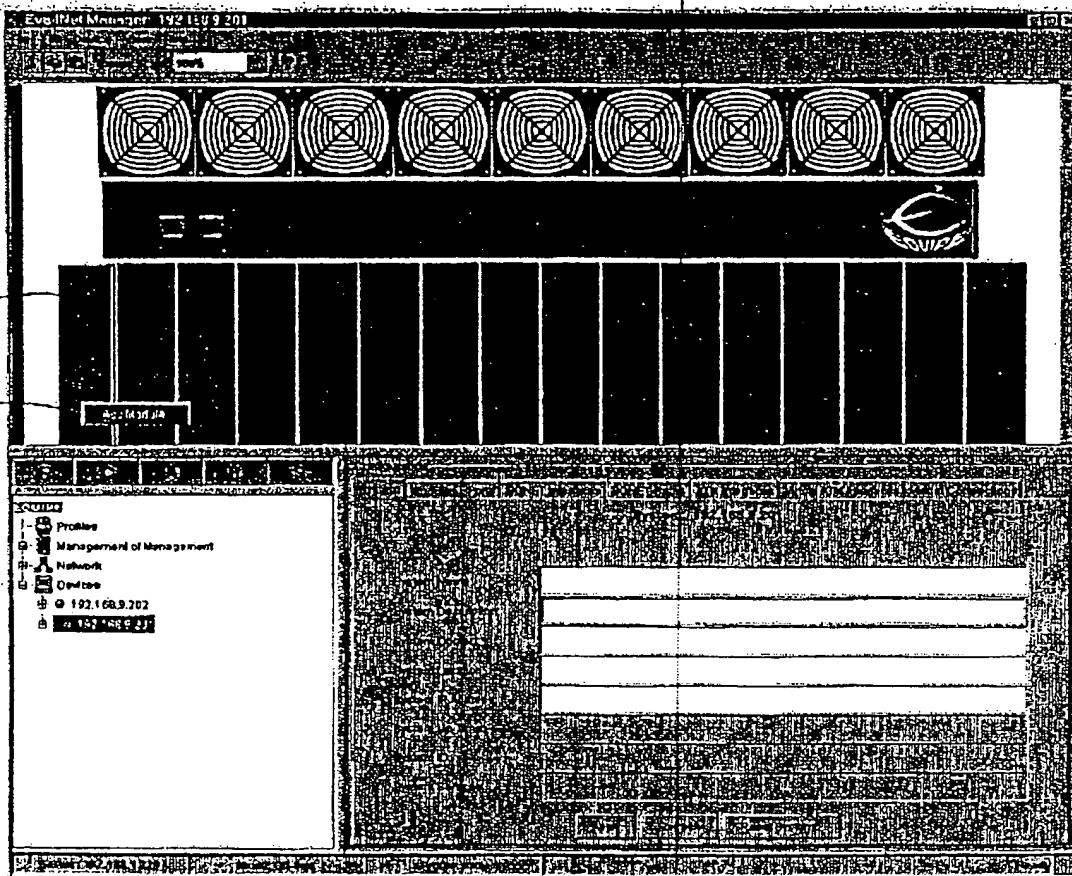


Fig. 6i



Fig. 6J

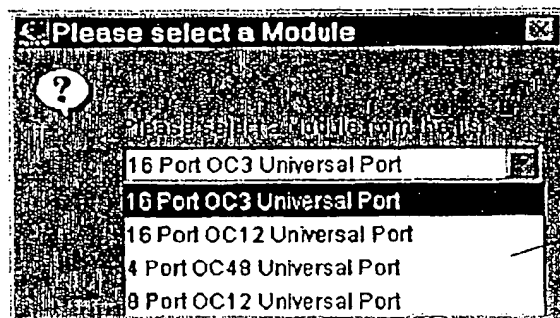
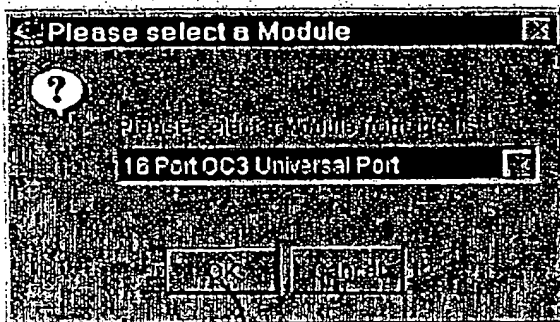


Fig. 6K

895

556i

556h

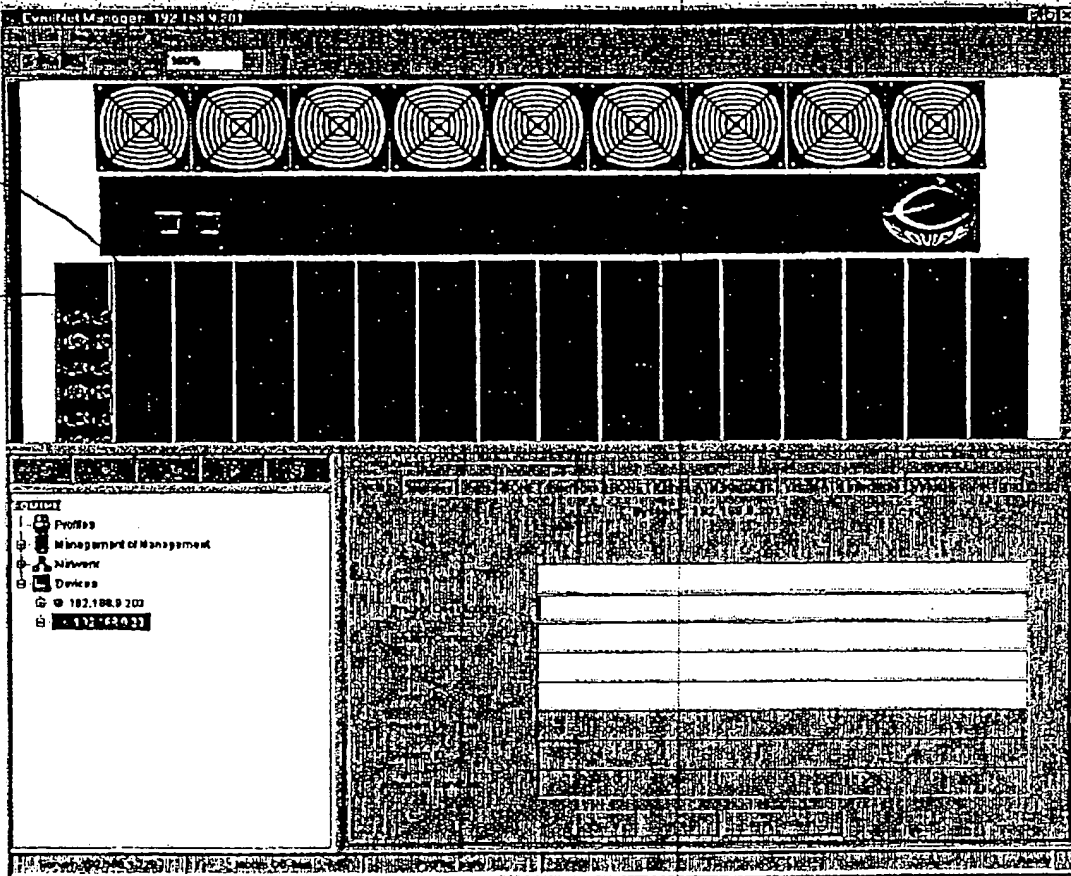


Fig. 6L

895

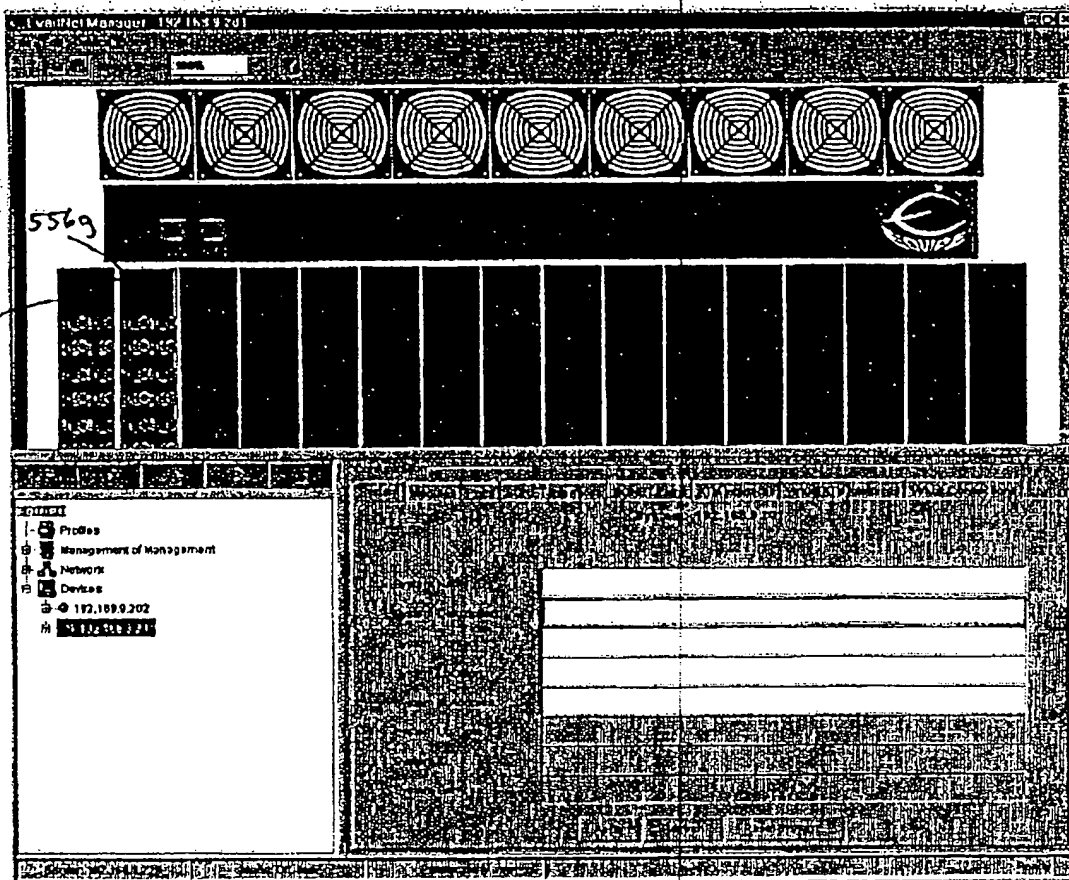


Fig.6m

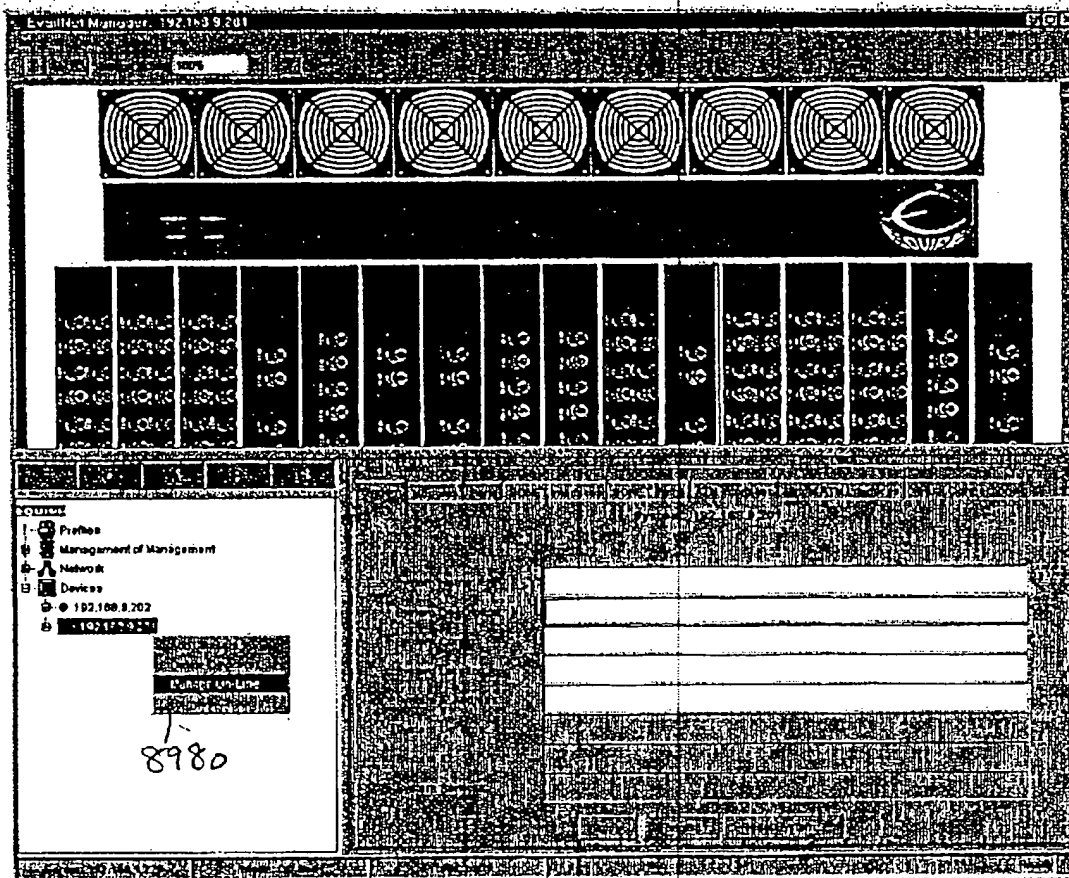


Fig. 6n

895

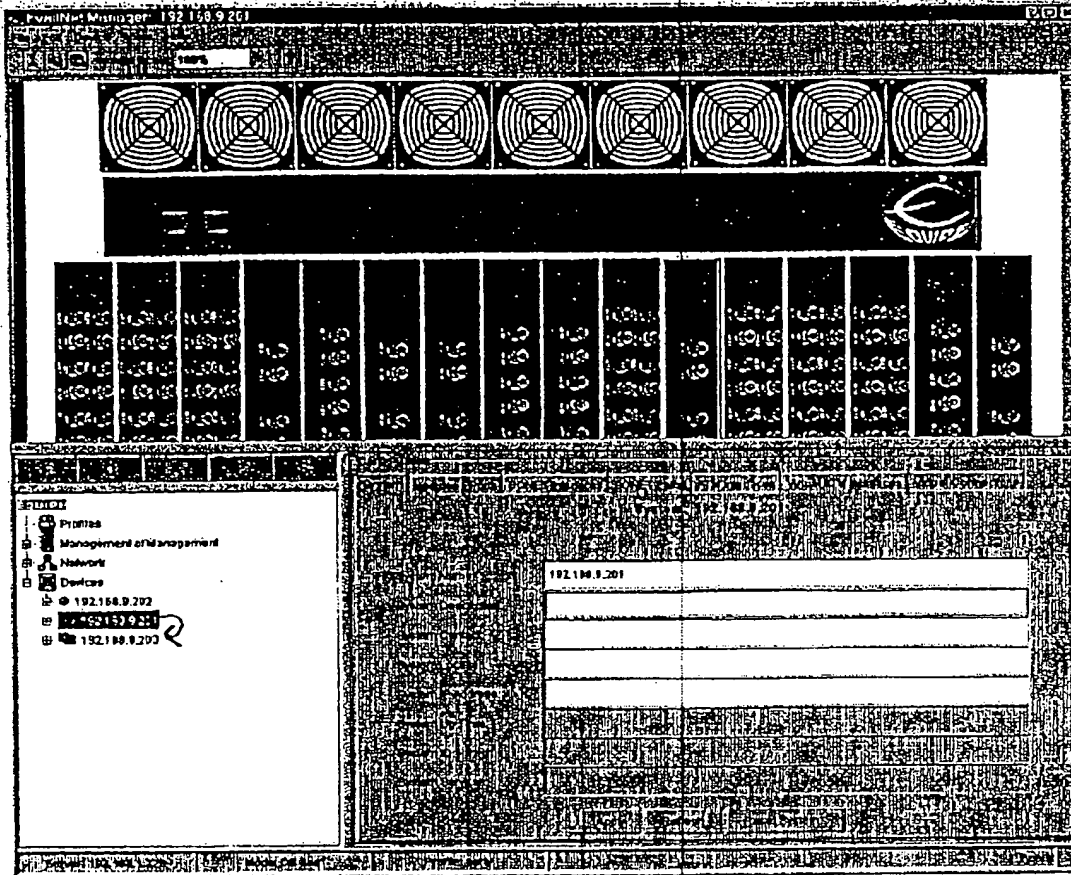


Fig.60

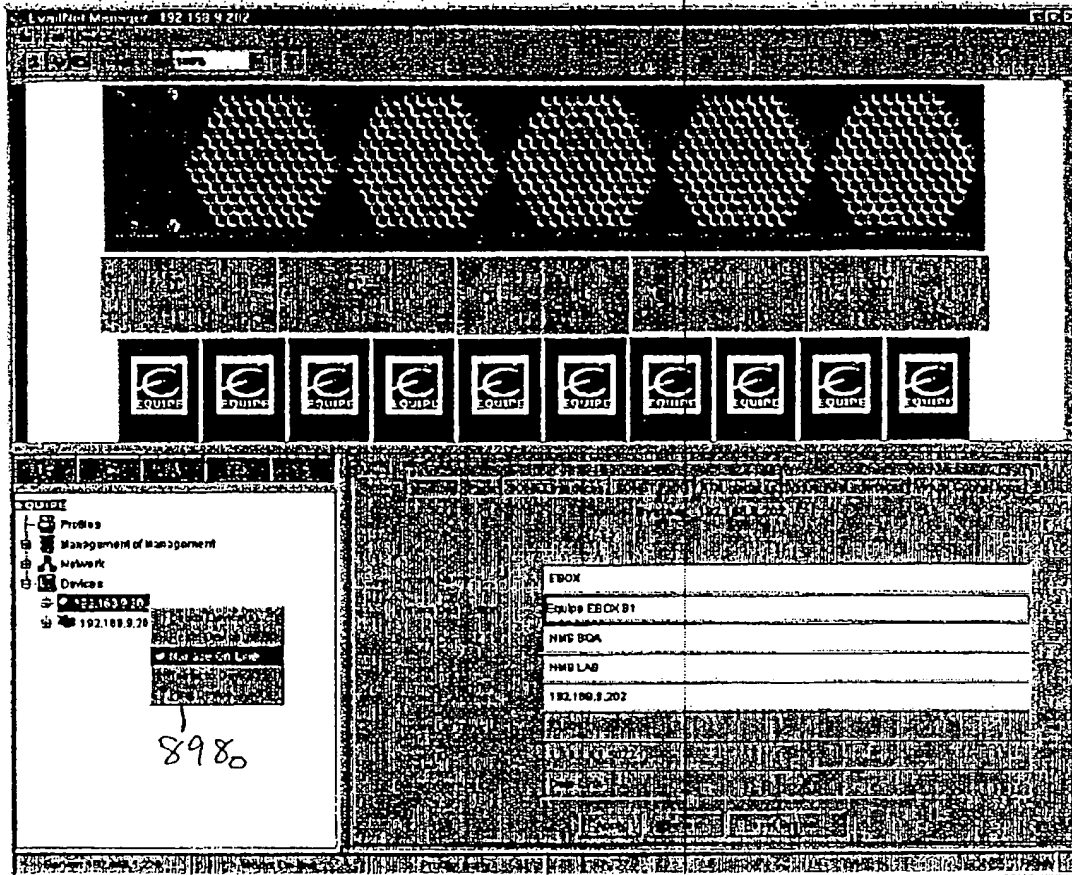


Fig. 6p

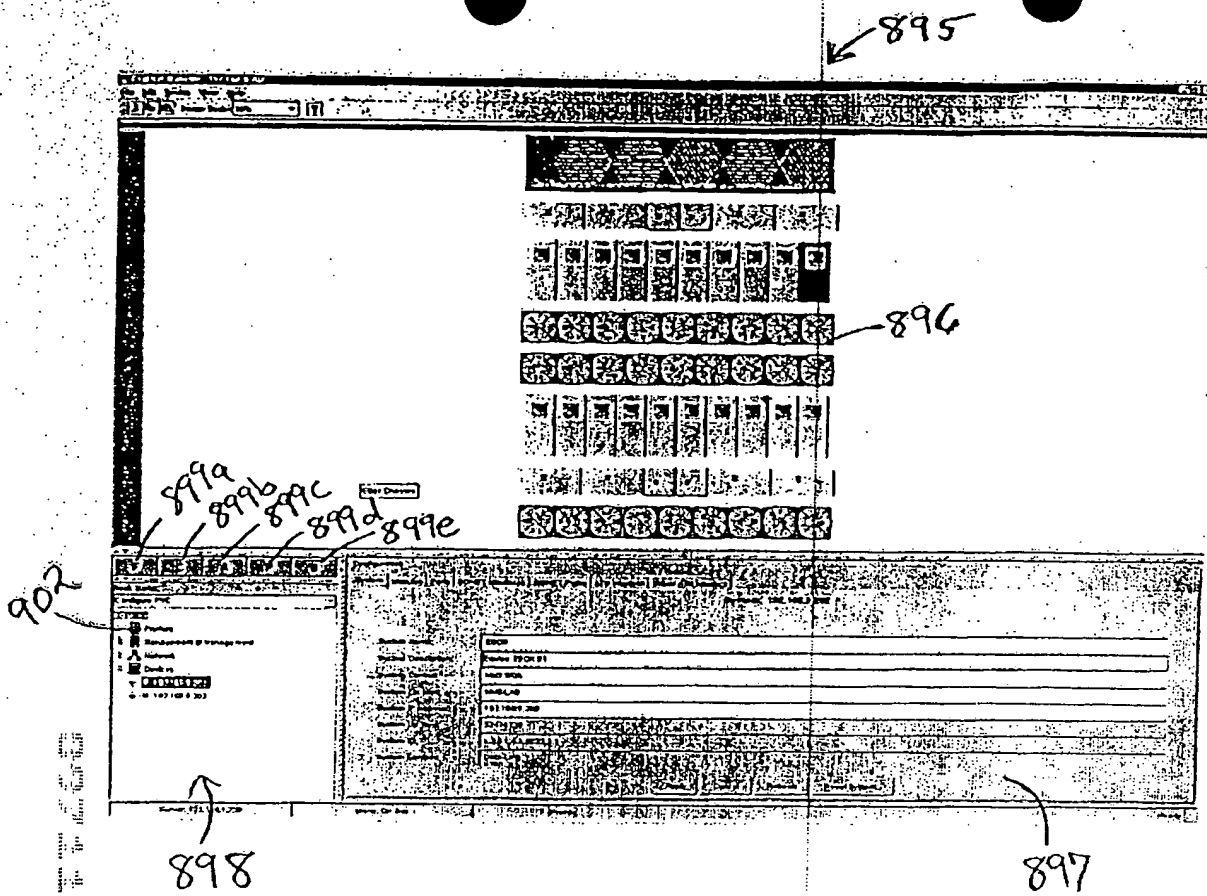


Fig. 7a

EvailNet Manager: Fault - Event Summary			
System: 192.168.65.60			
System	Event	Event Number	Description
1.1.55.6	Fan OverTemp	44	"Fan marginally functioning"
1.1.55.7	New Board Ins...	75	"New board inserted"
[OK]			

Fig. 7b



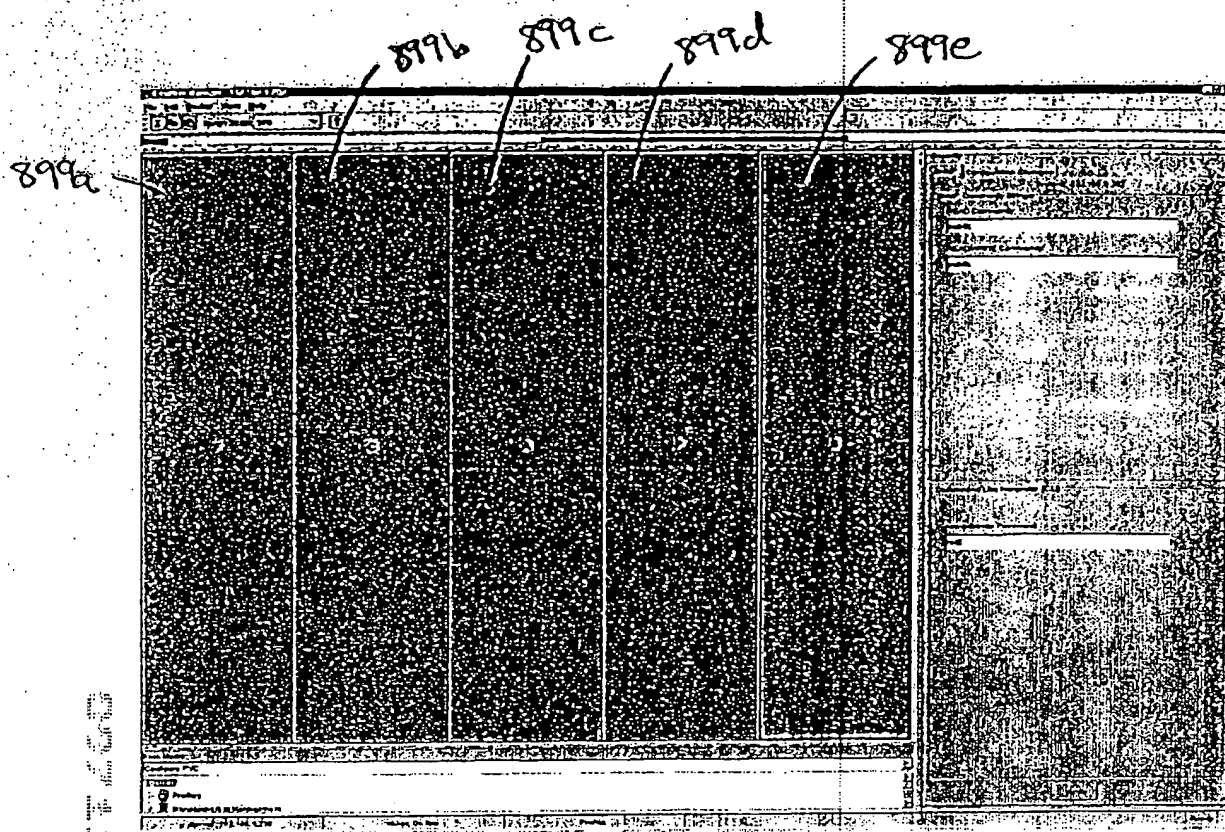


Fig. 7c

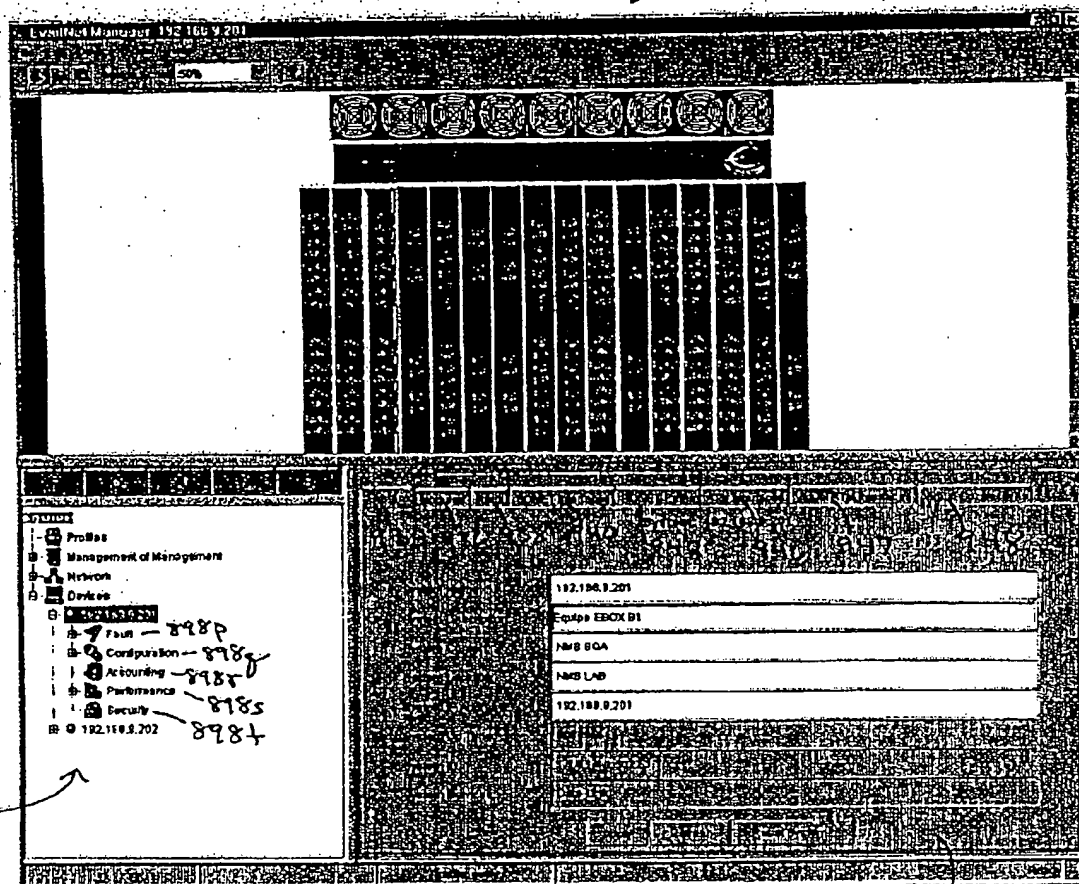
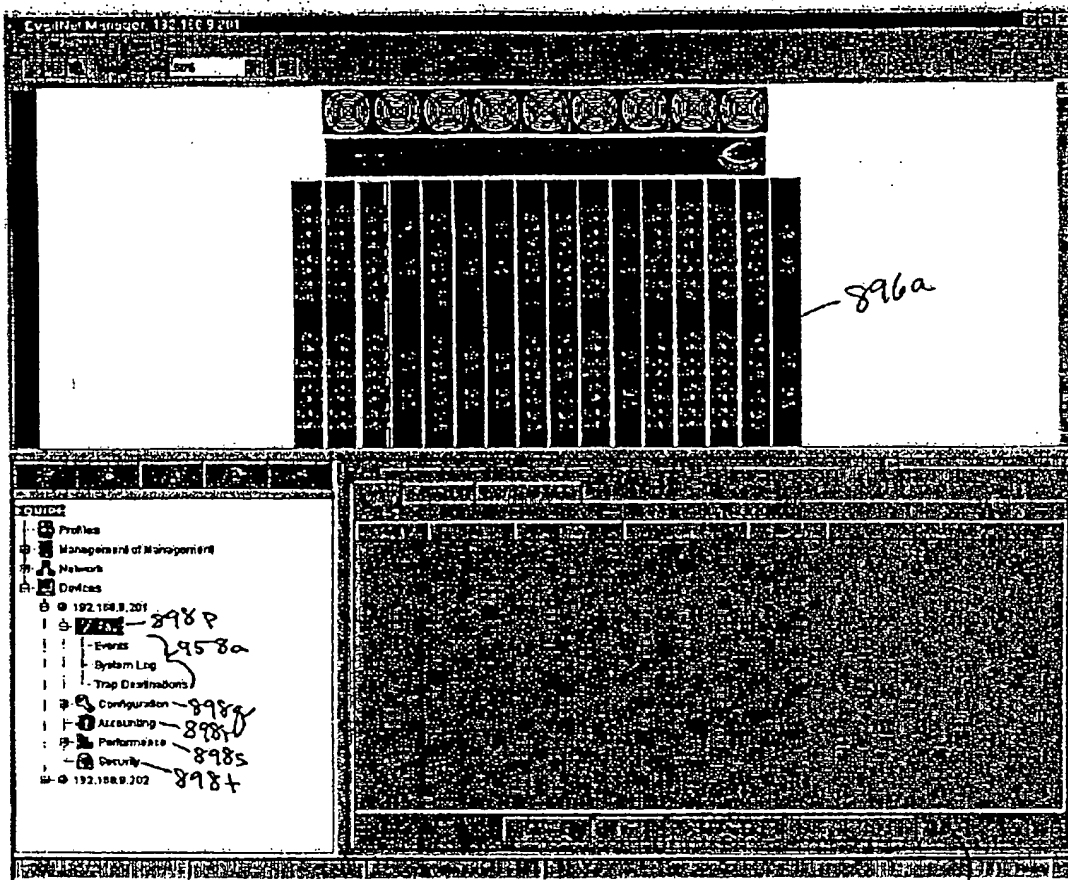


Fig. 7d

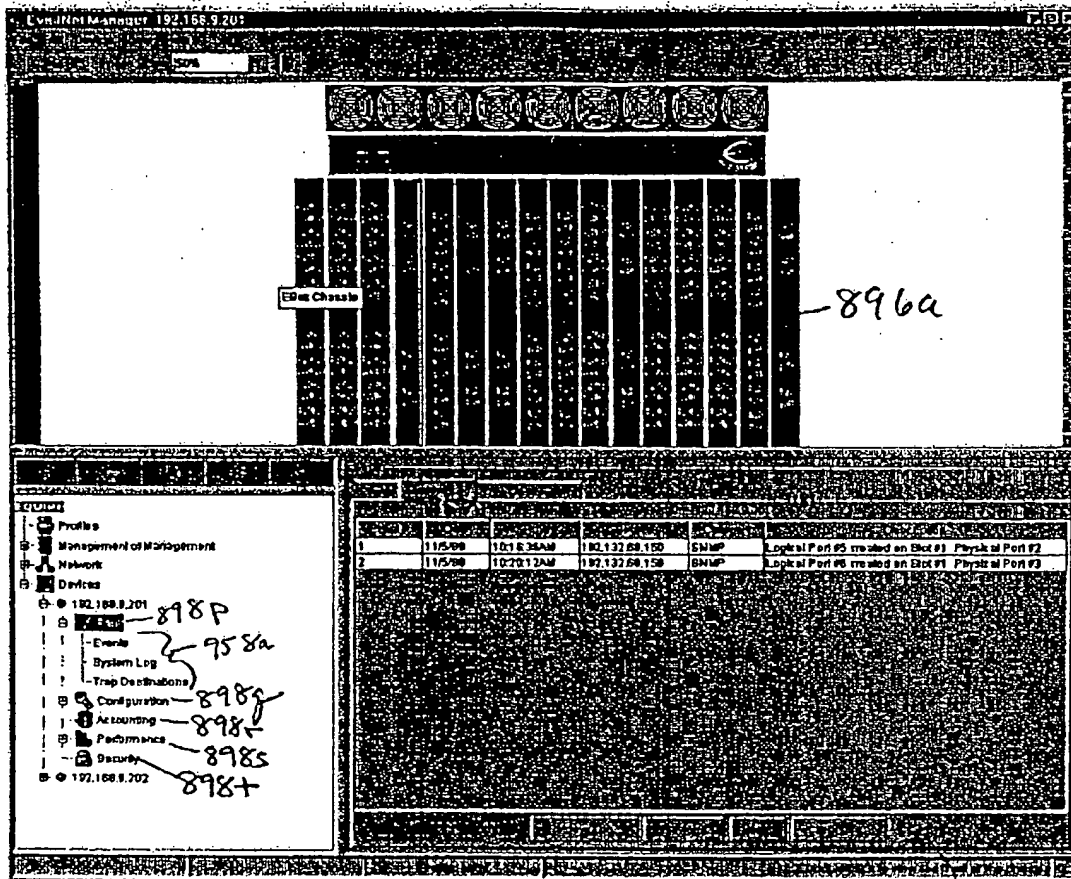
895



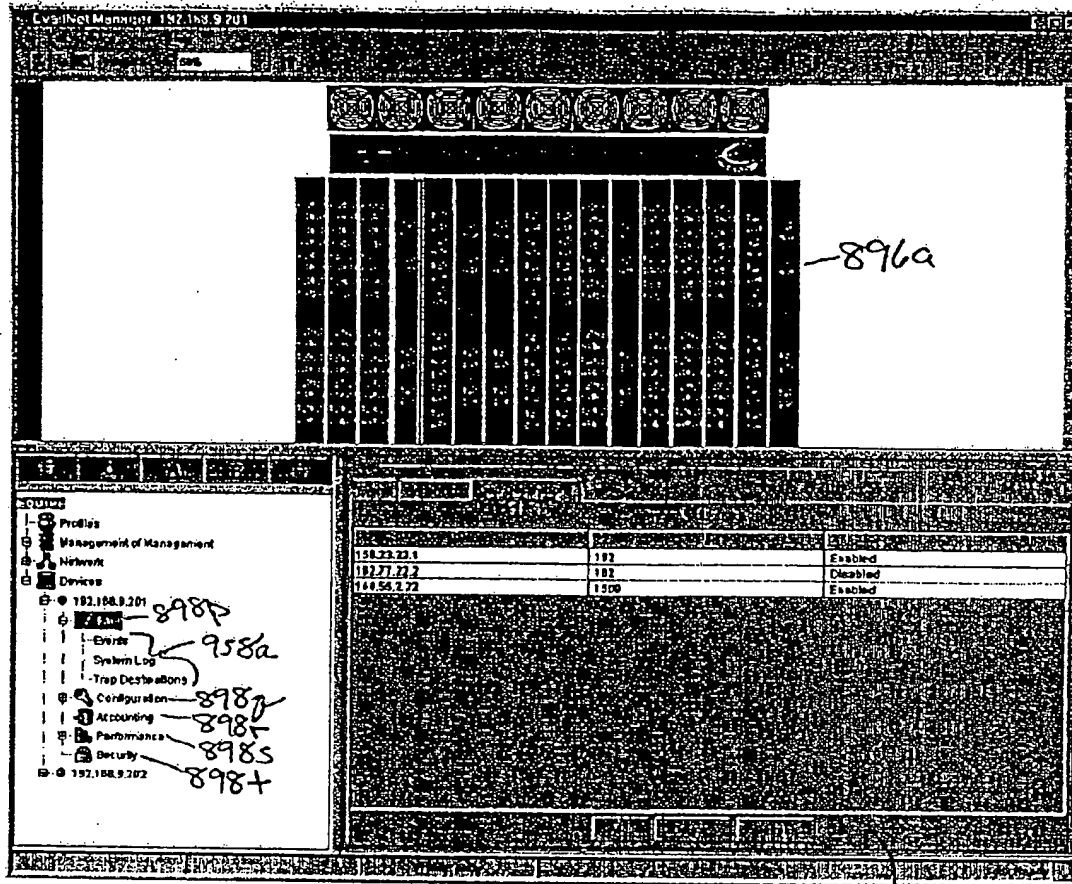
896a

897

Fig. 7e



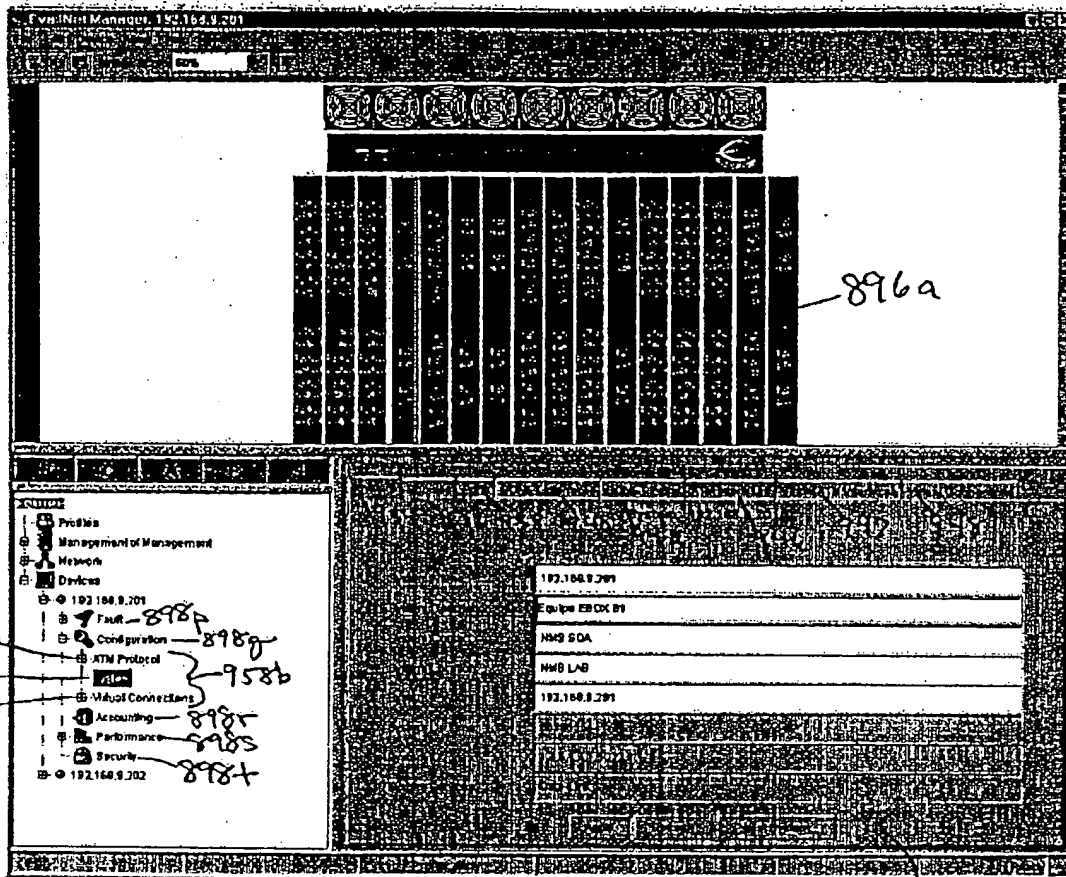
895



897

Fig. 7g

895



897

Fig. 7h

895

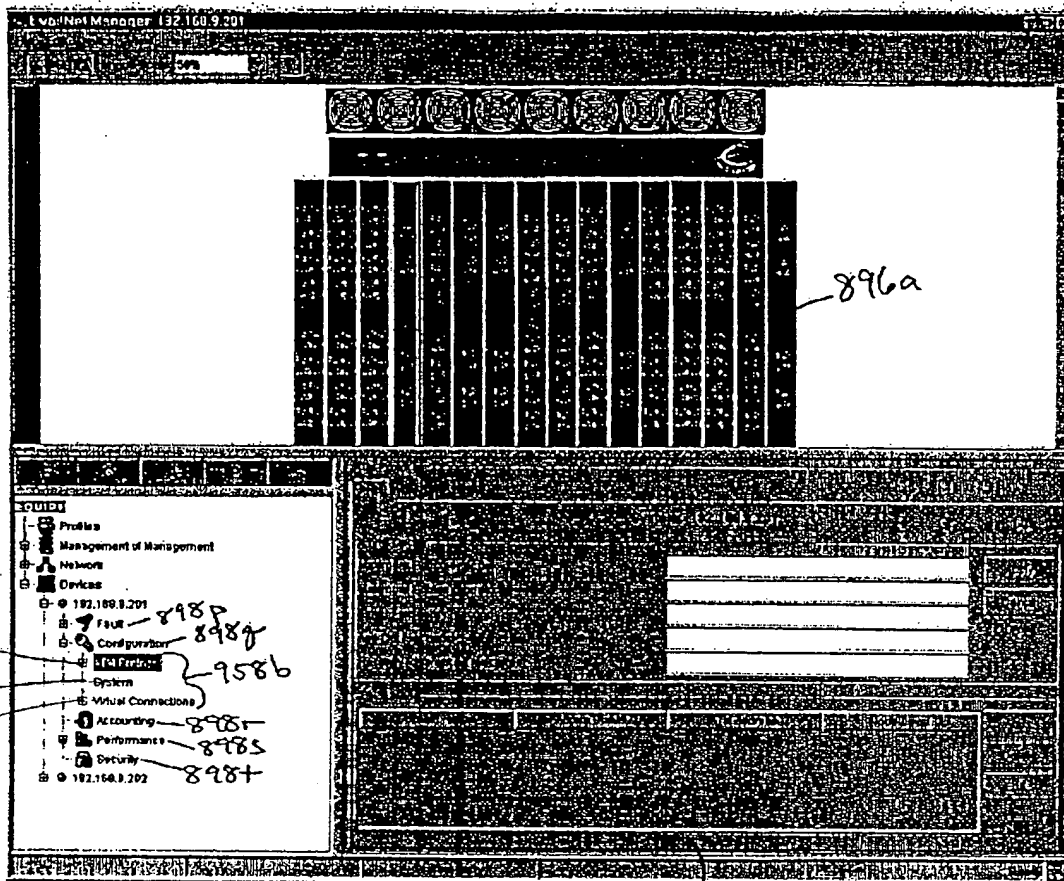


Fig. 7i

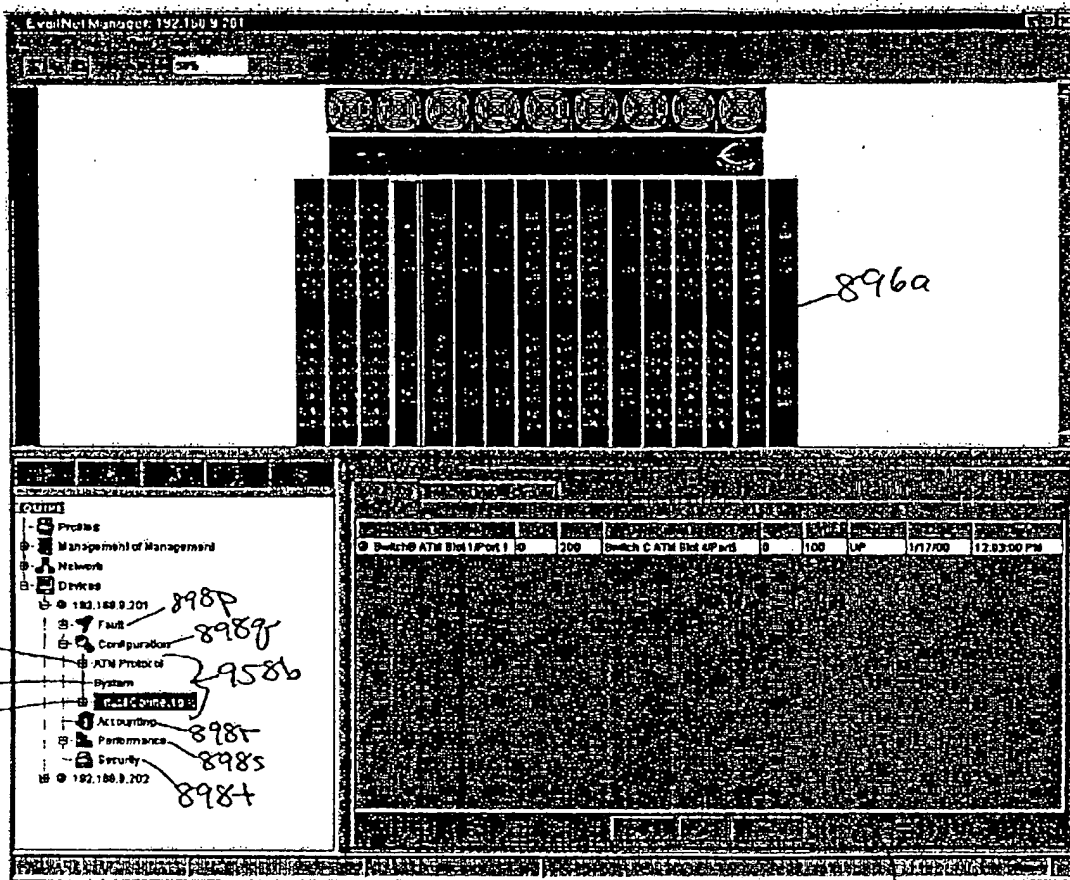


Fig. 7j



← 895

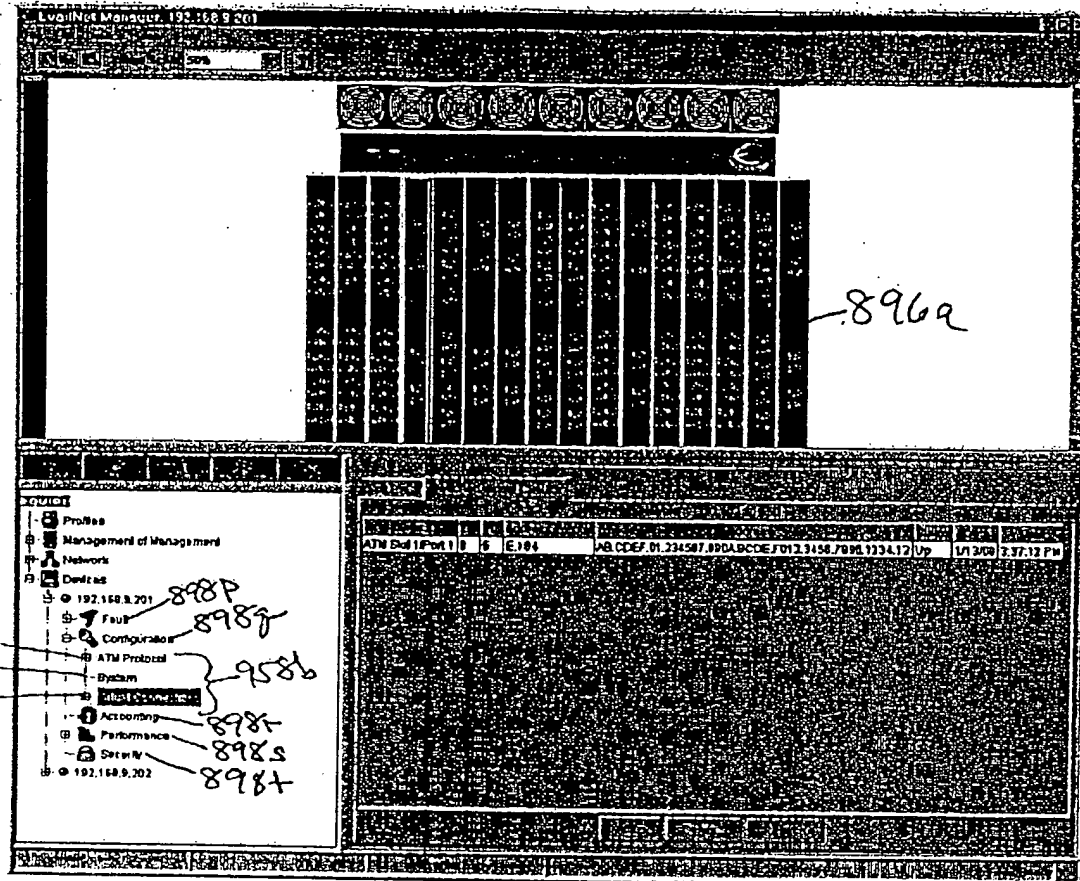


Fig. 7K

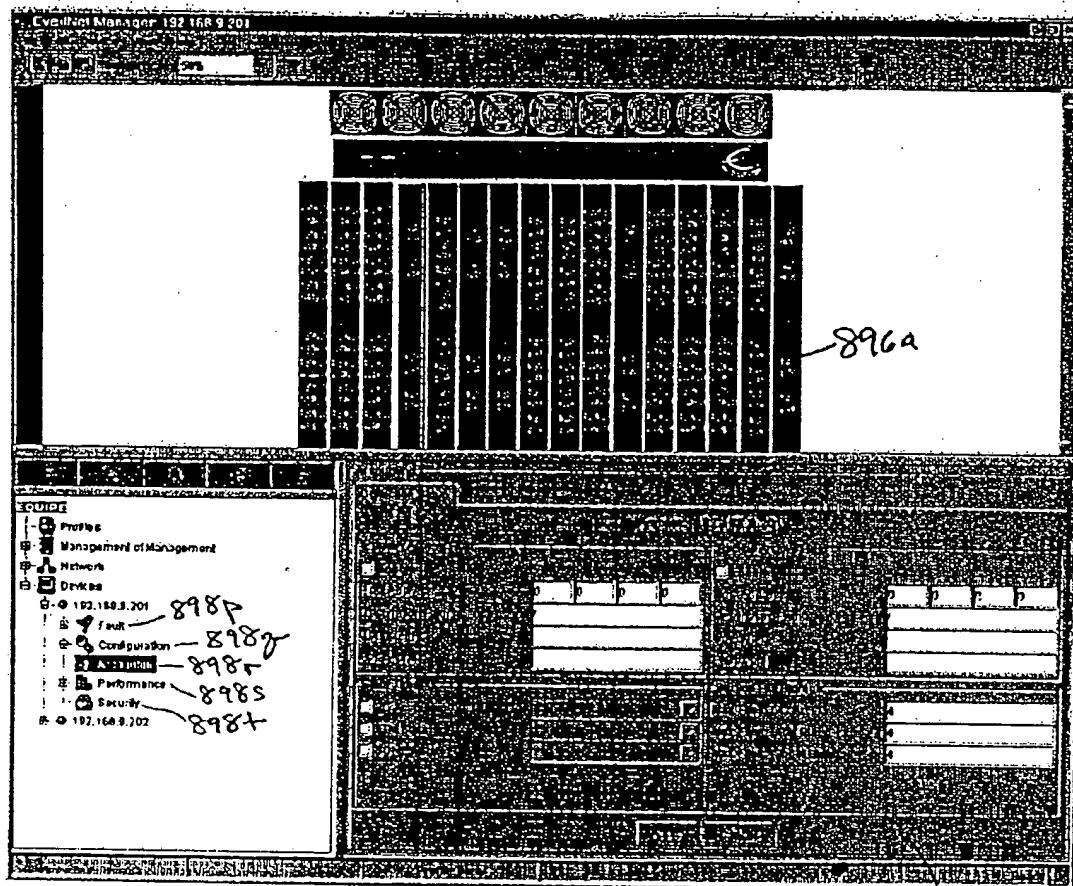


Fig. 7L

895

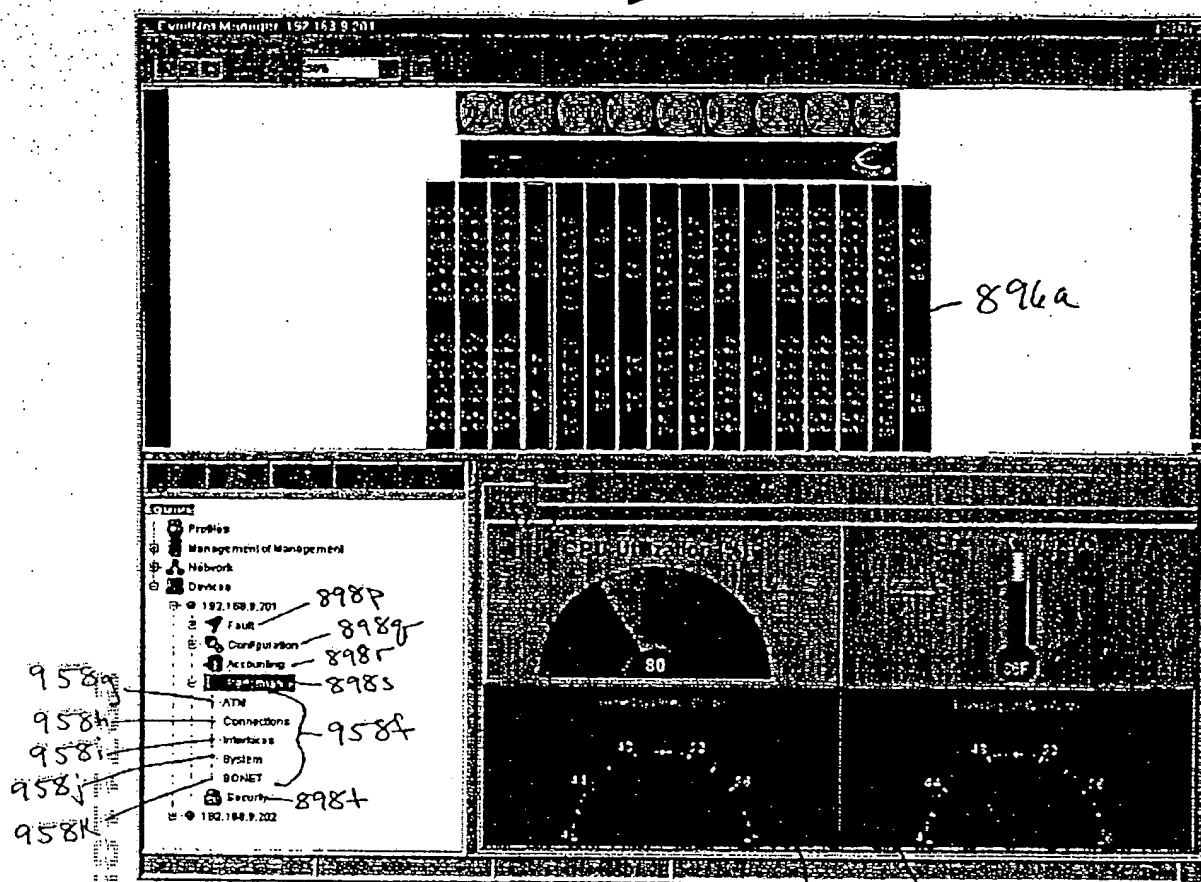


Fig. 7m

895

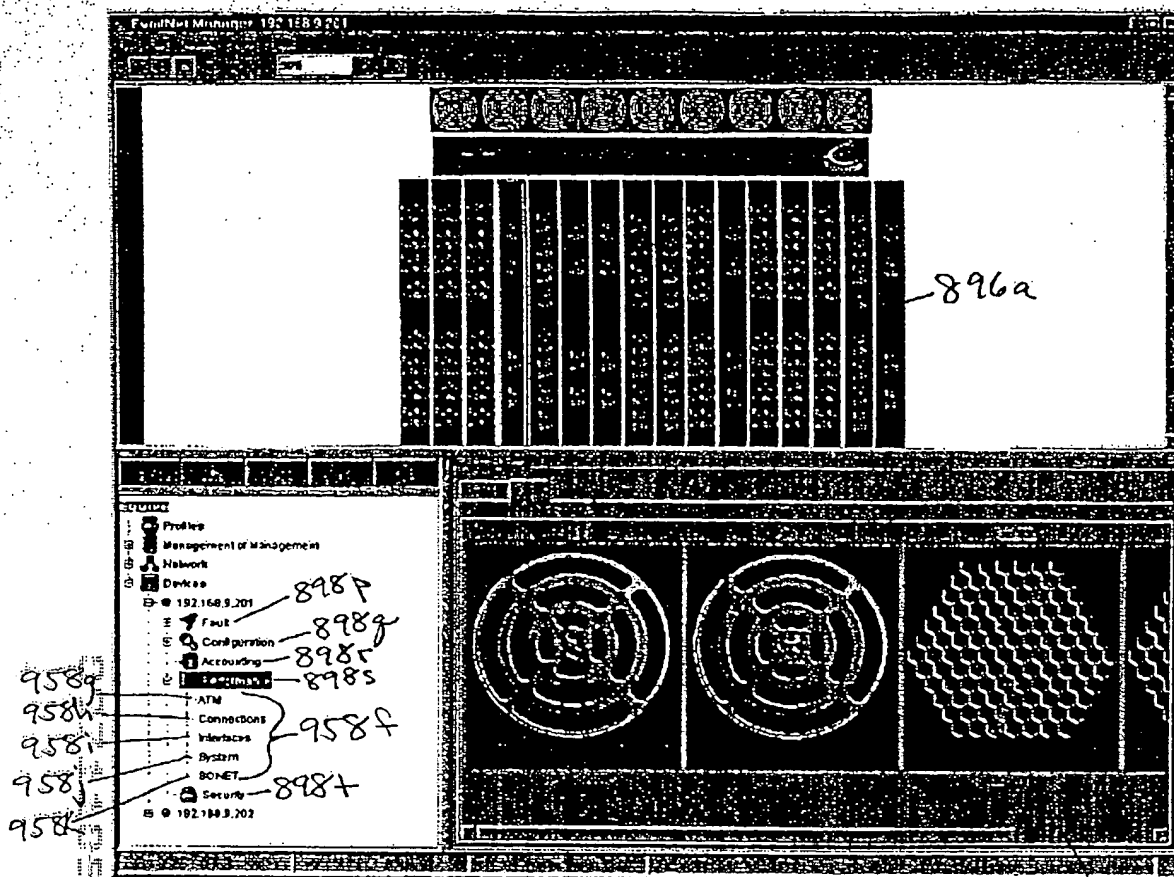


Fig. 7n

895

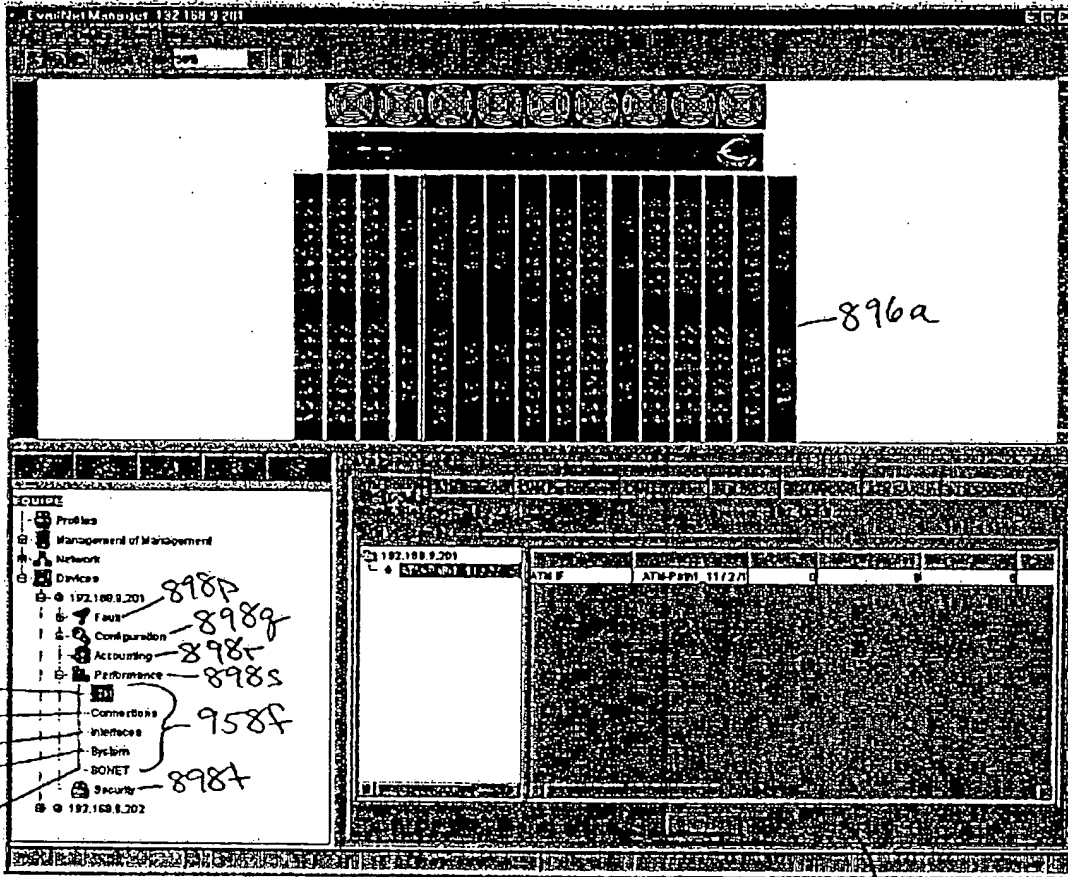


Fig. 70

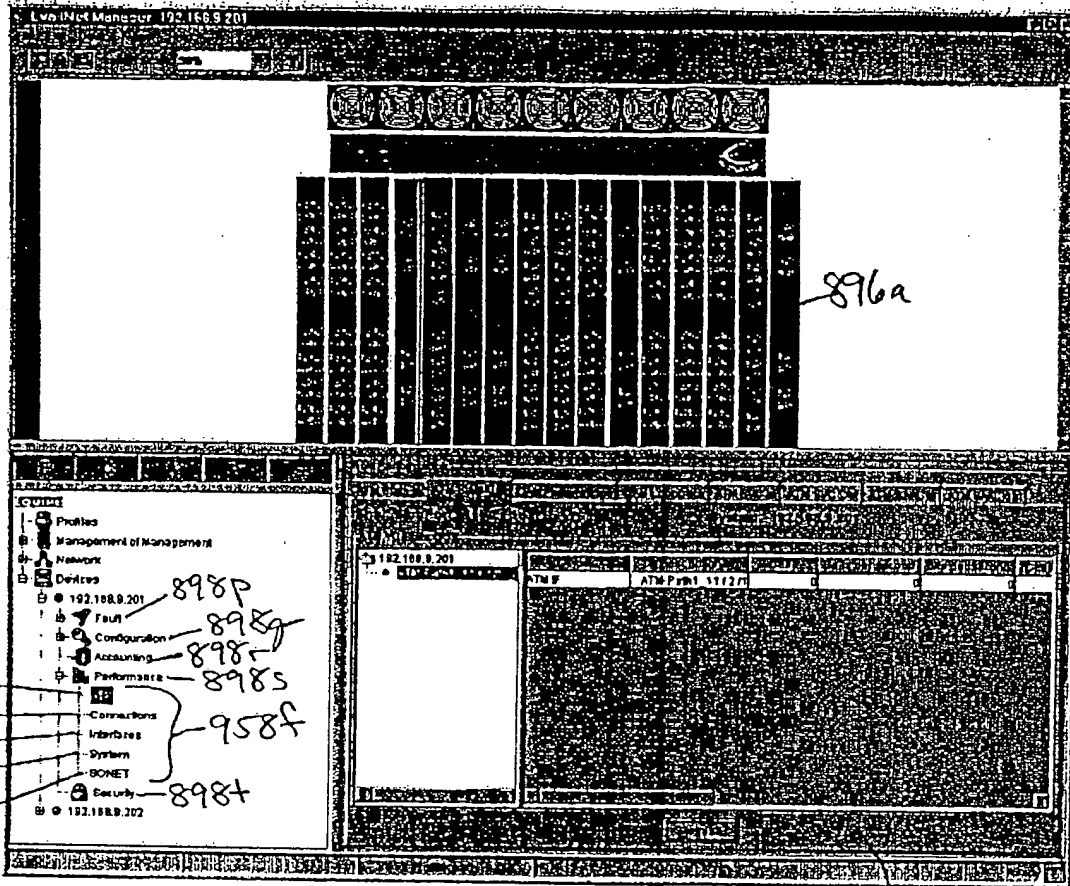


Fig. 7p

895

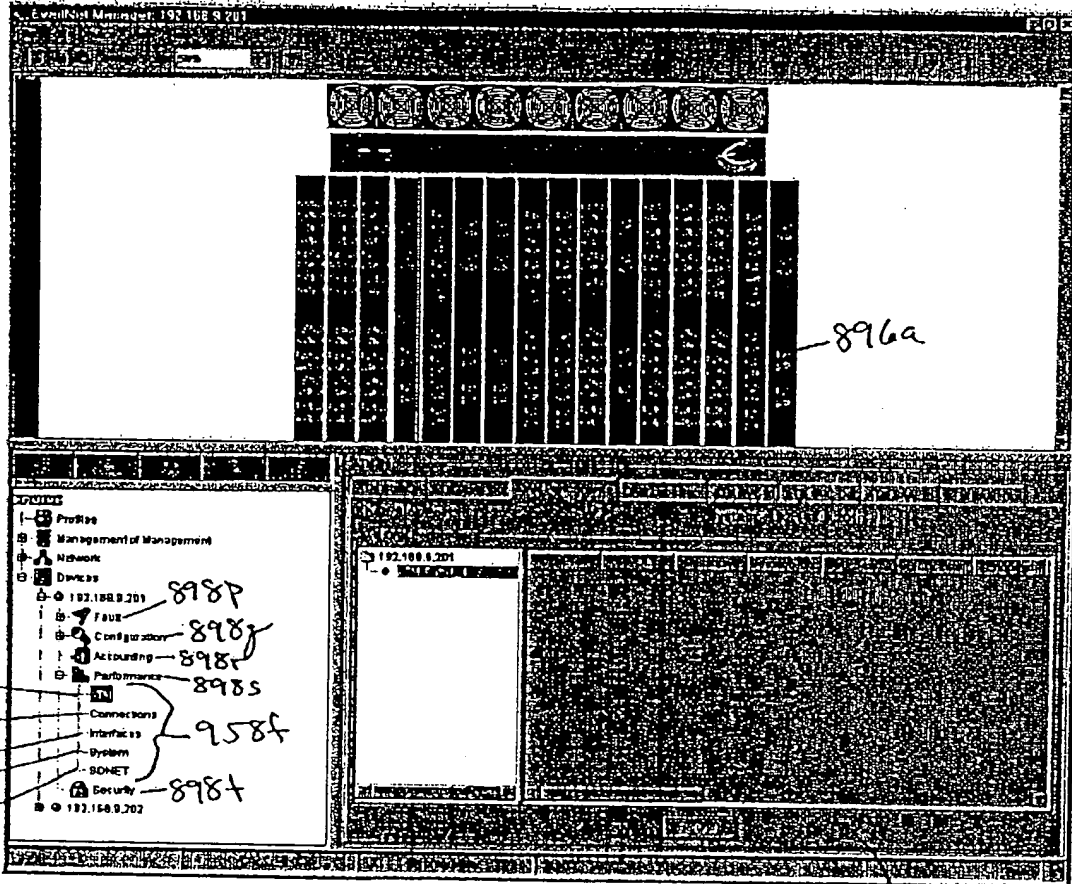
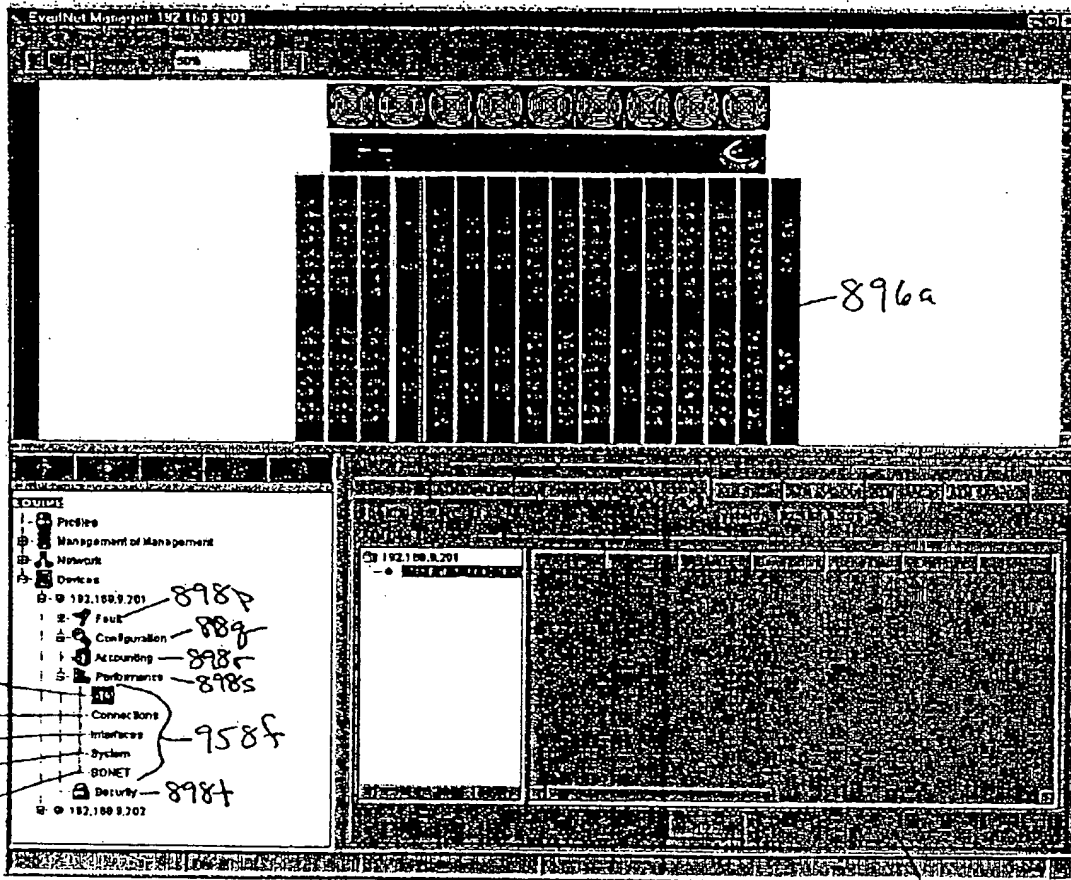


Fig. 7g

895



897

Fig. 7



895

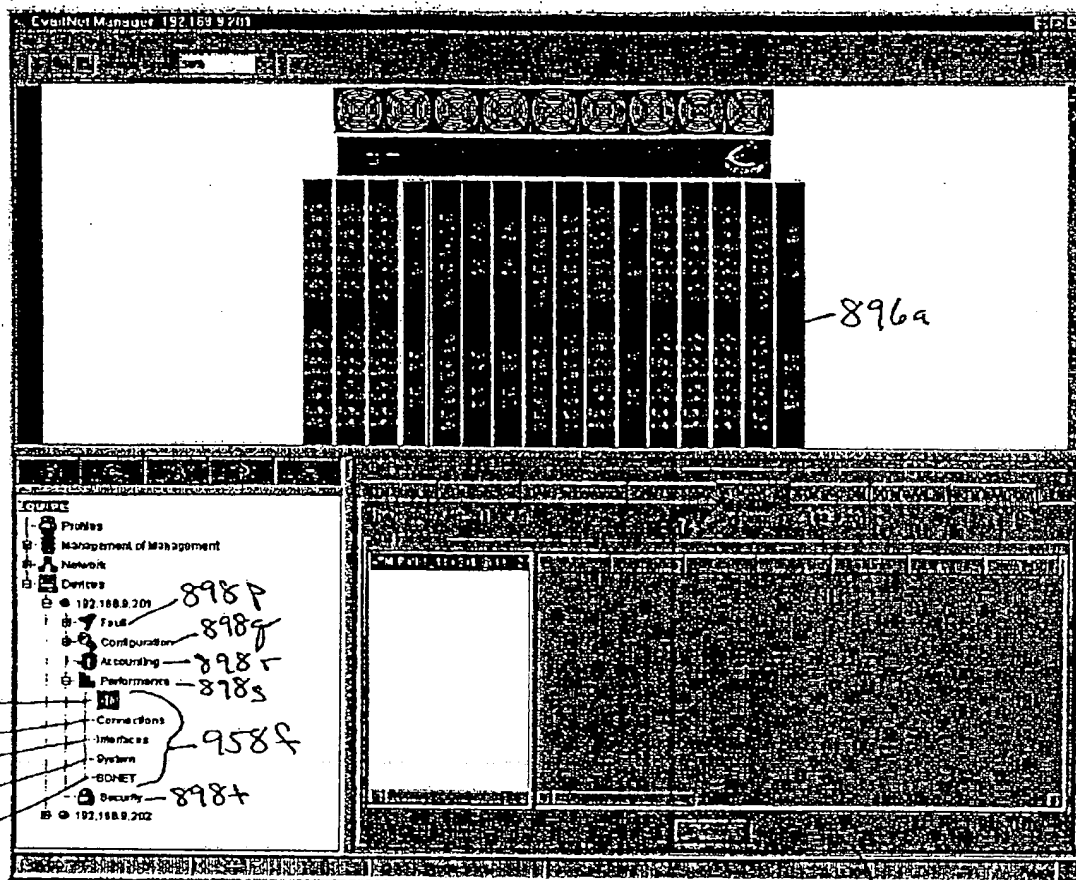


Fig. 7s

895

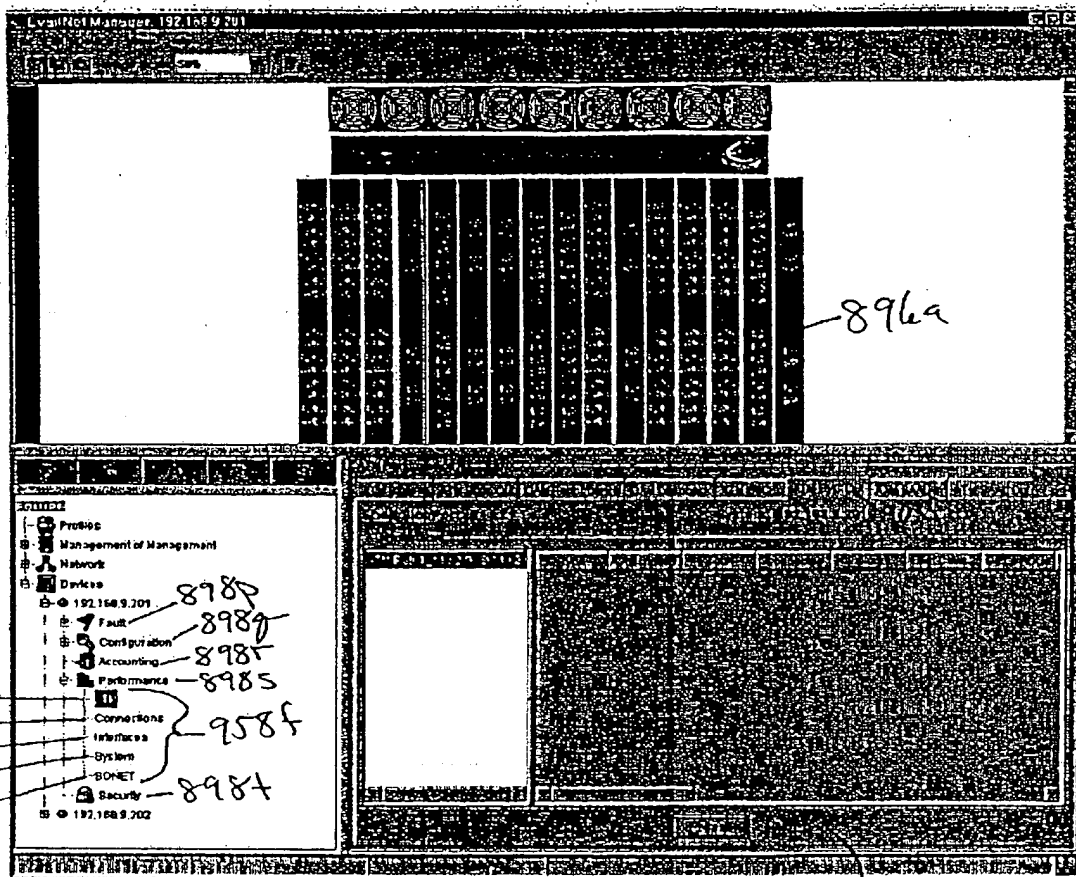


Fig. 7+

895

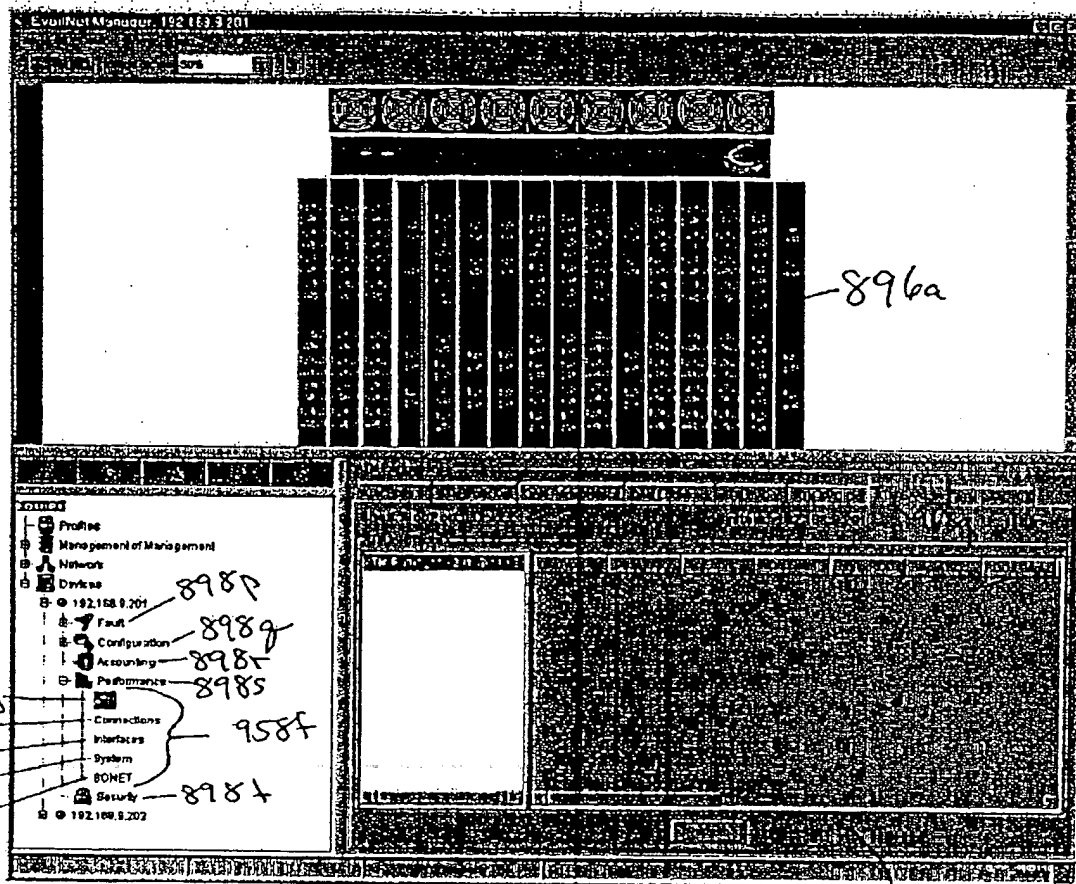


Fig. 7u

895

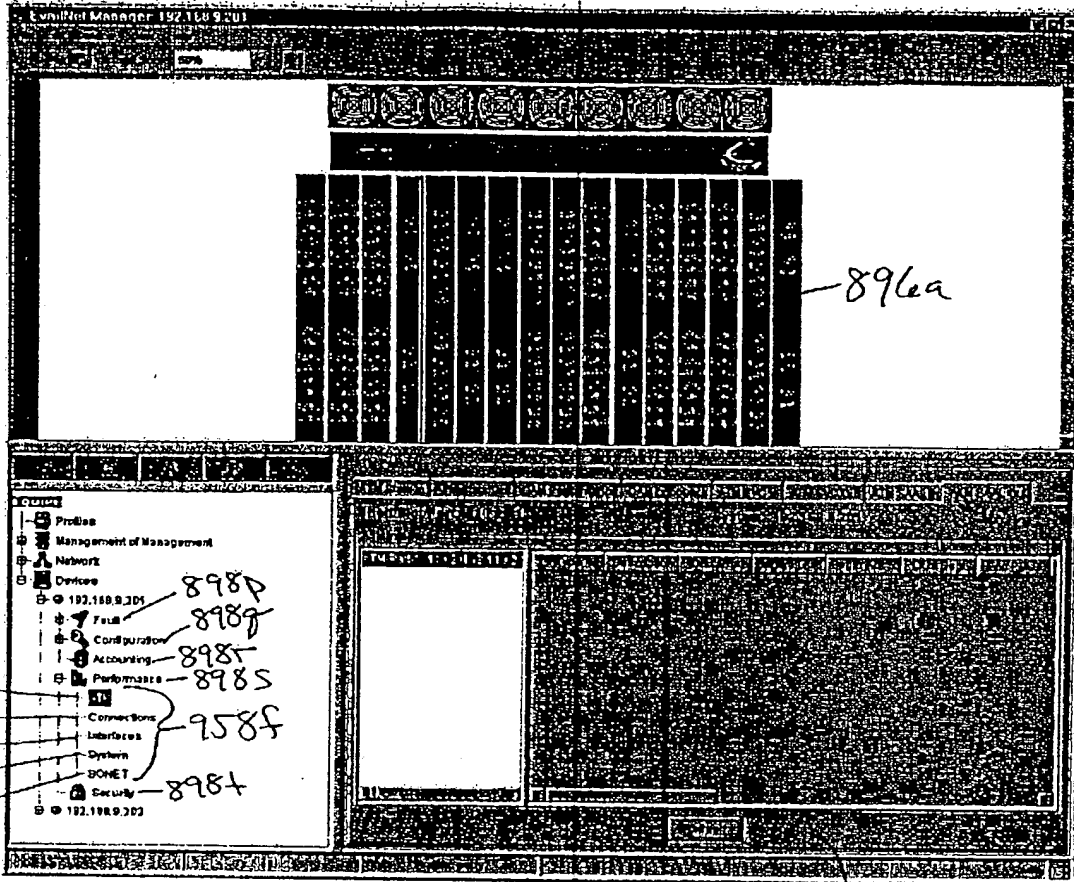
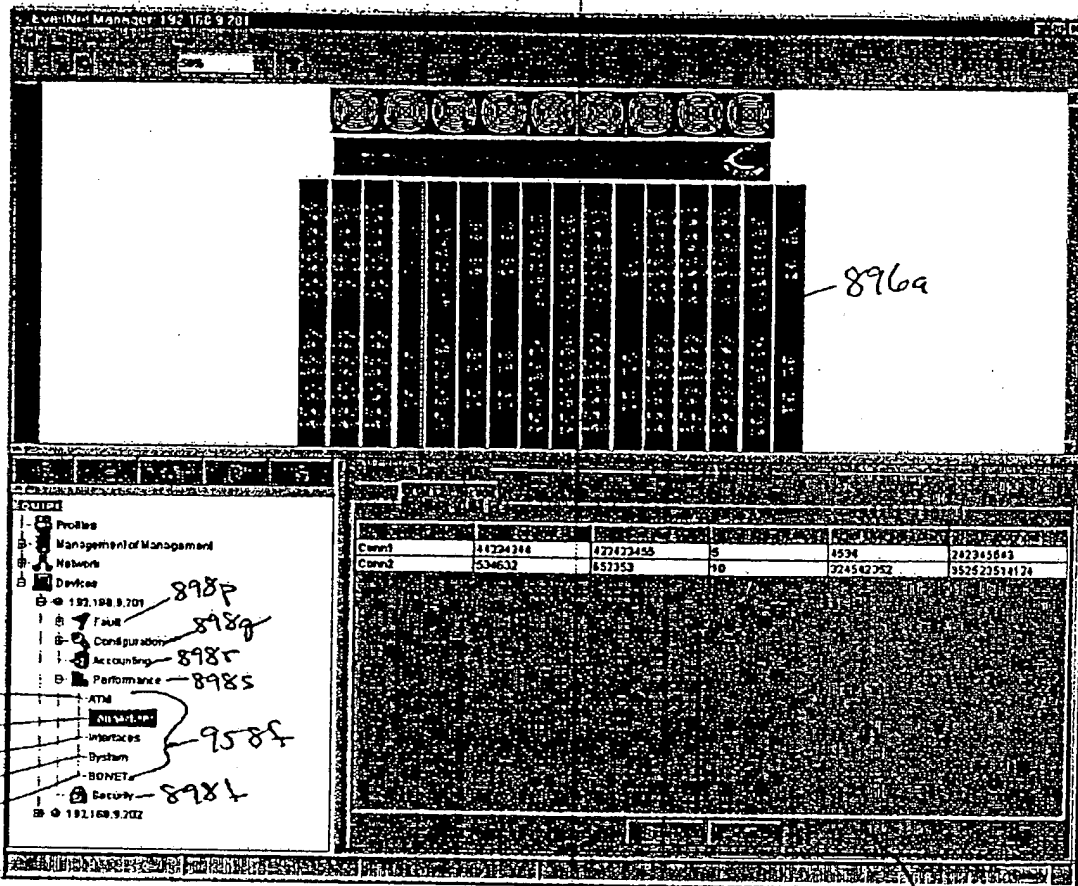


Fig. 7v

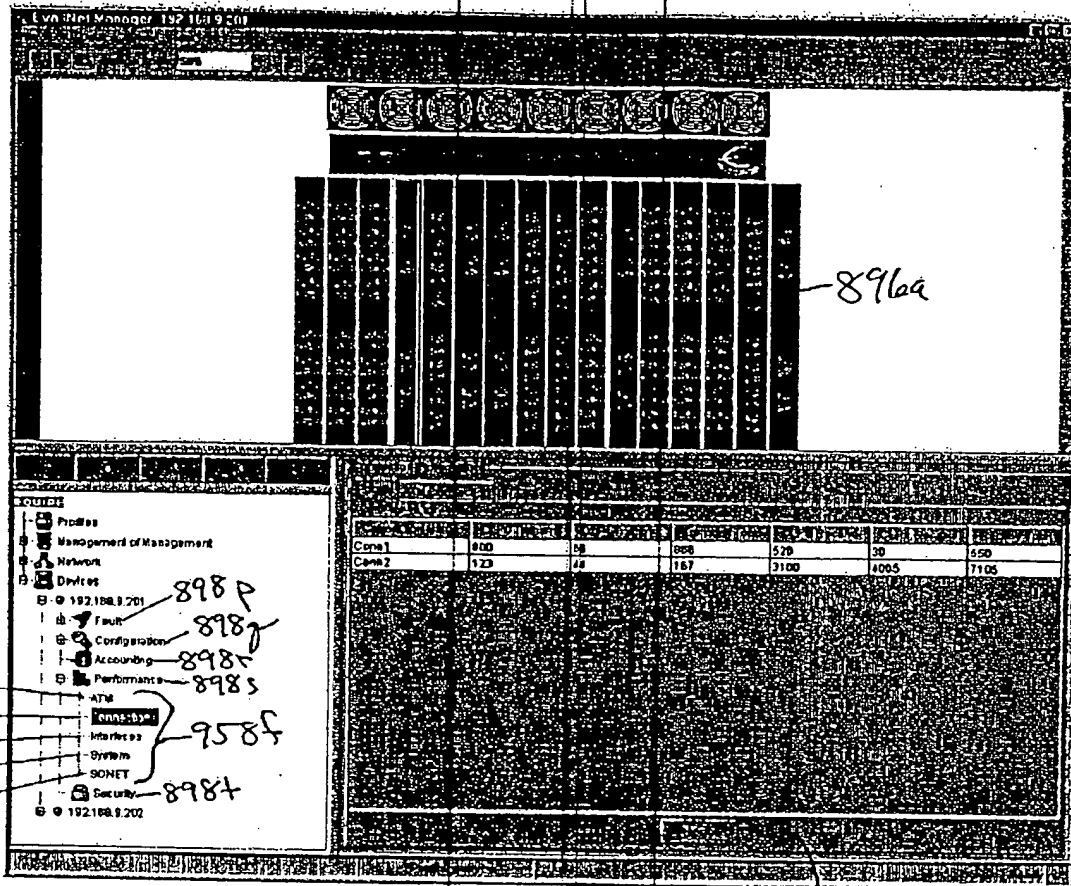
895



897

Fig. 7w

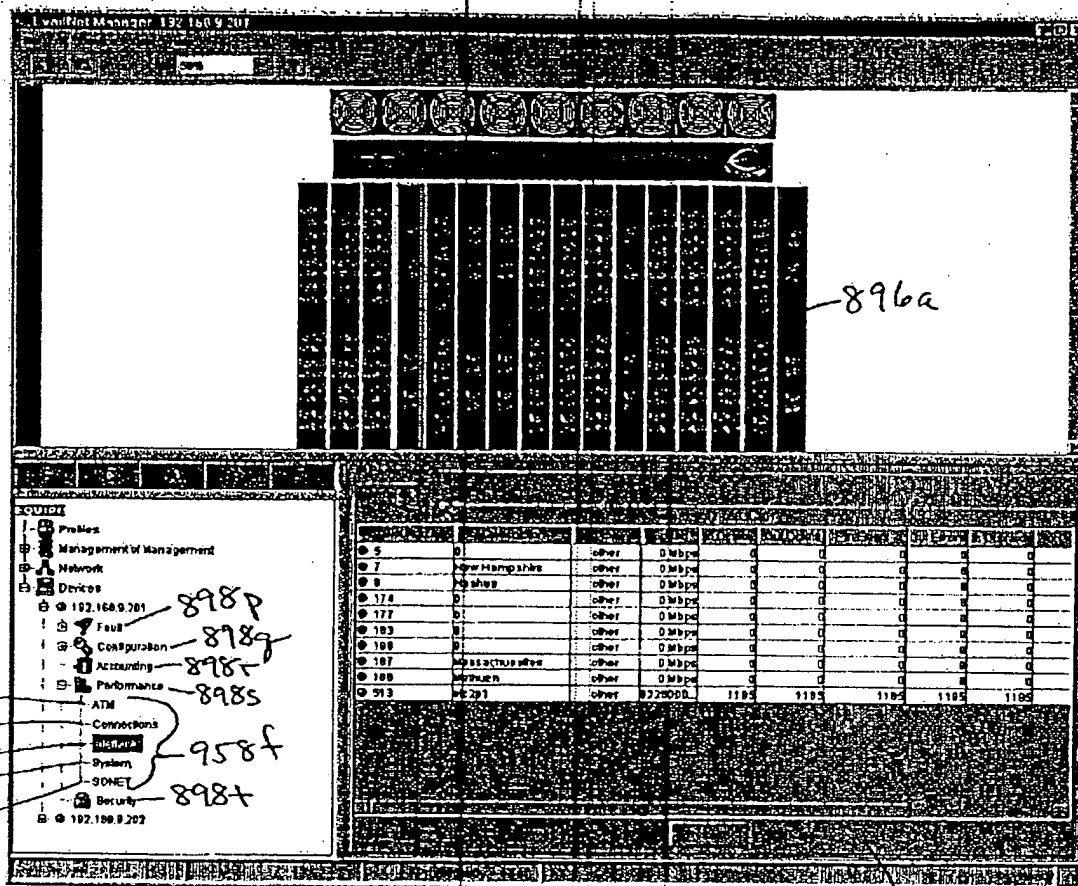
895



897

Fig. 7x

895



897

Fig. 74

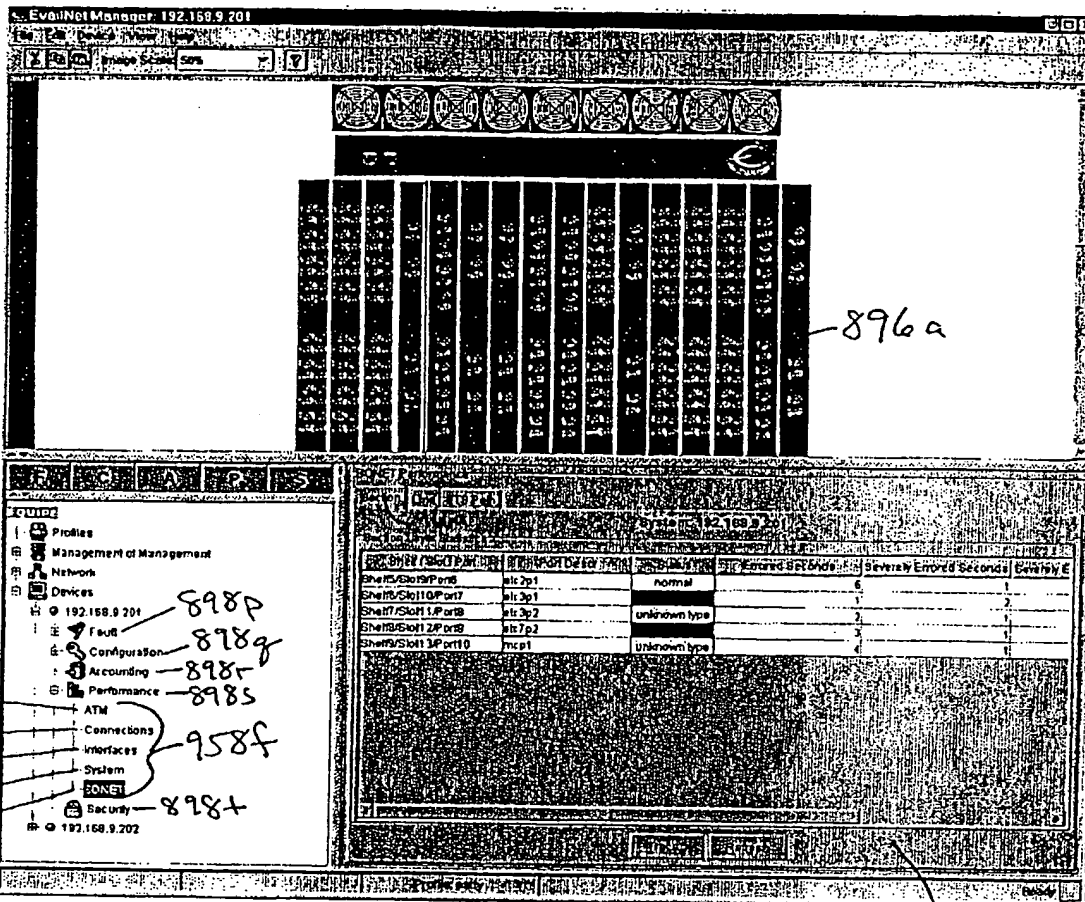


Fig. 8a



895

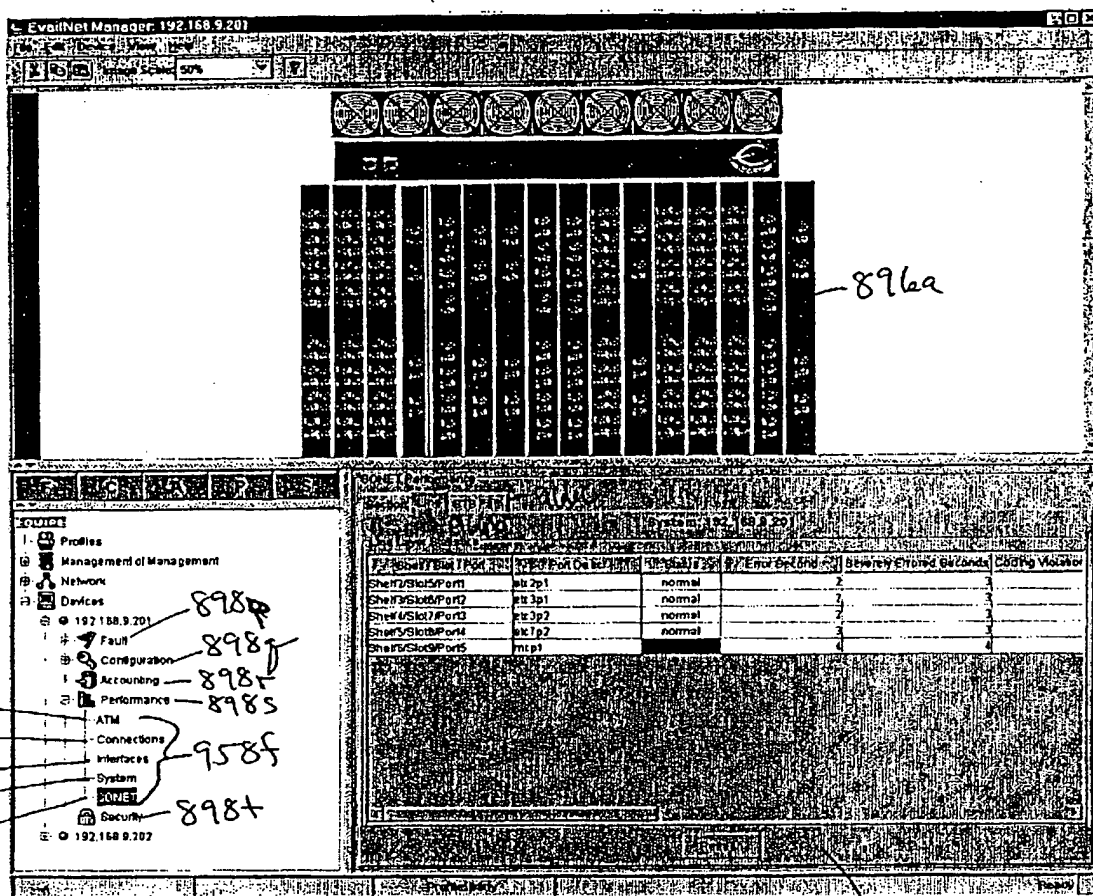


Fig. 8b

895

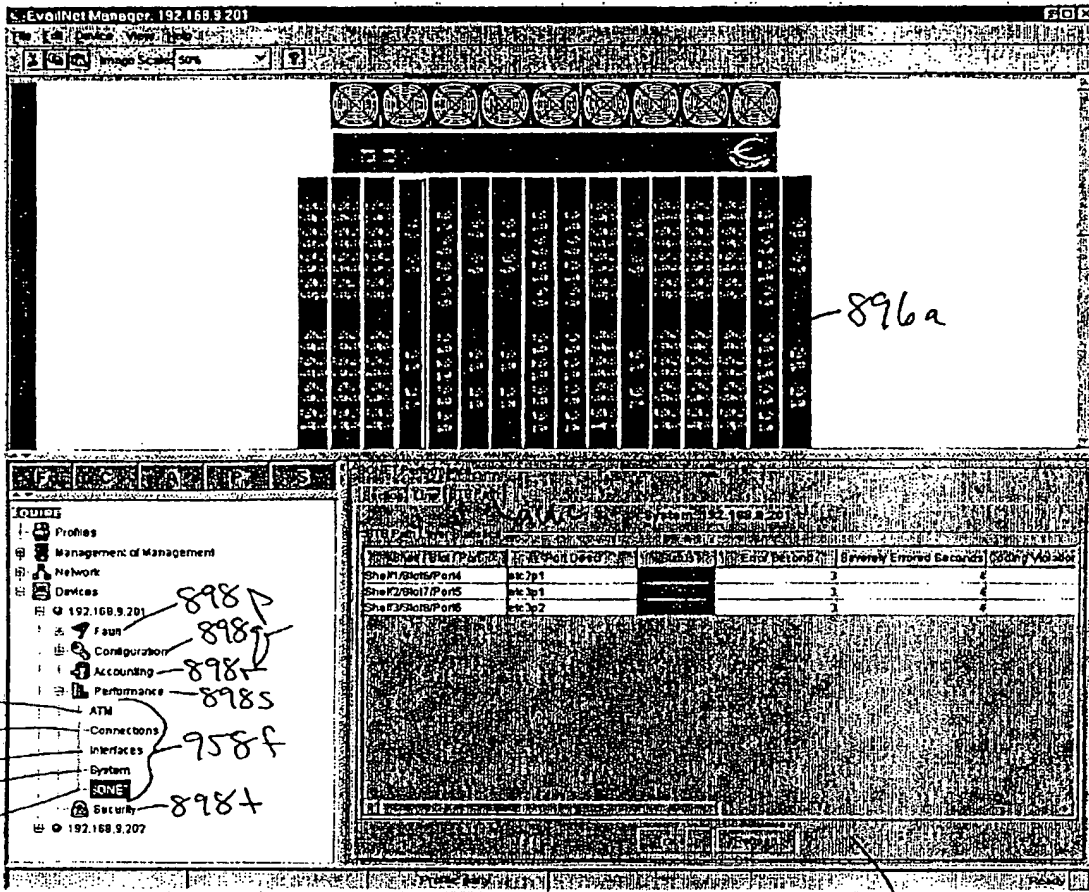
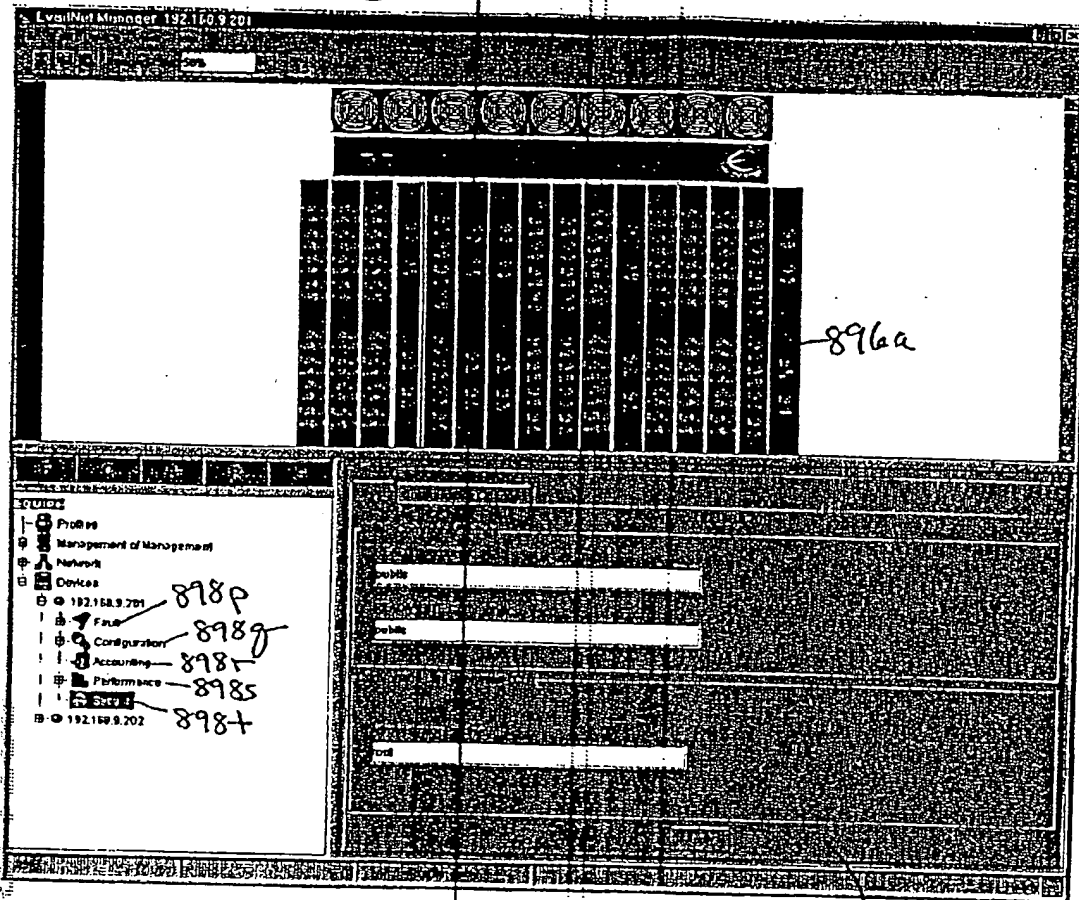


Fig. 8c

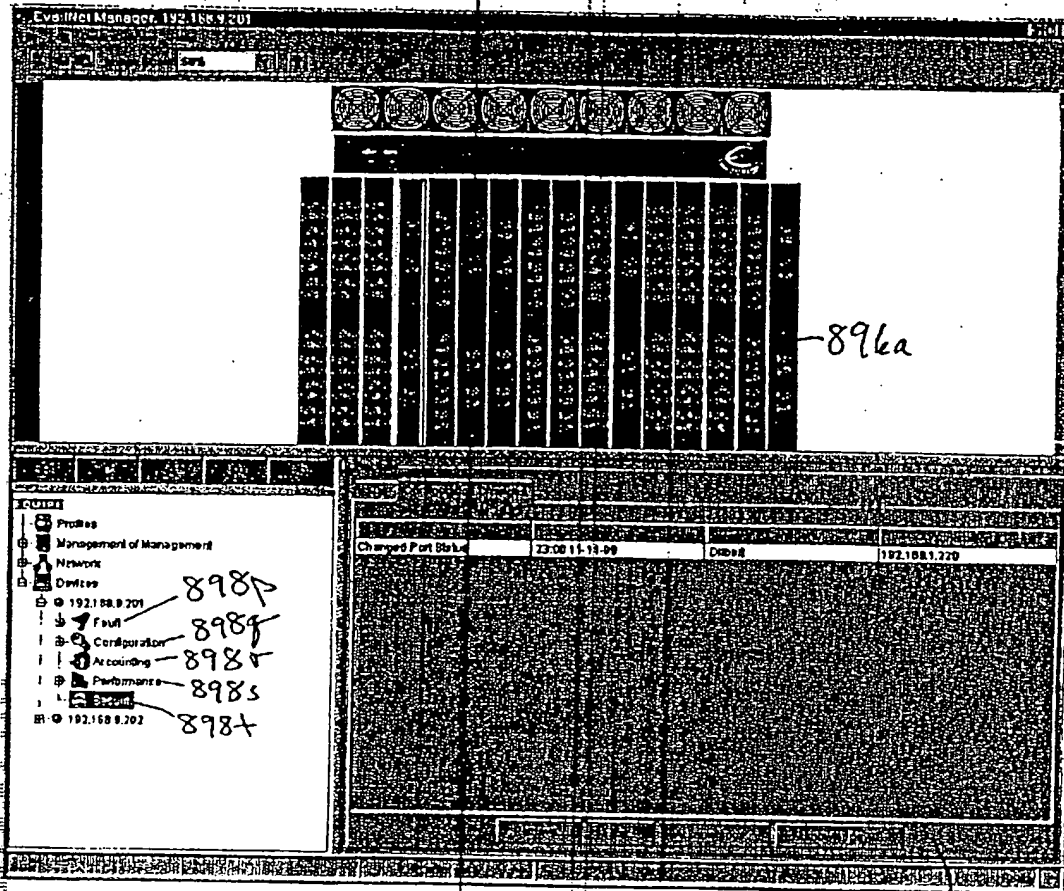
895



897

Fig. 8d

895



897

Fig. 8e

895

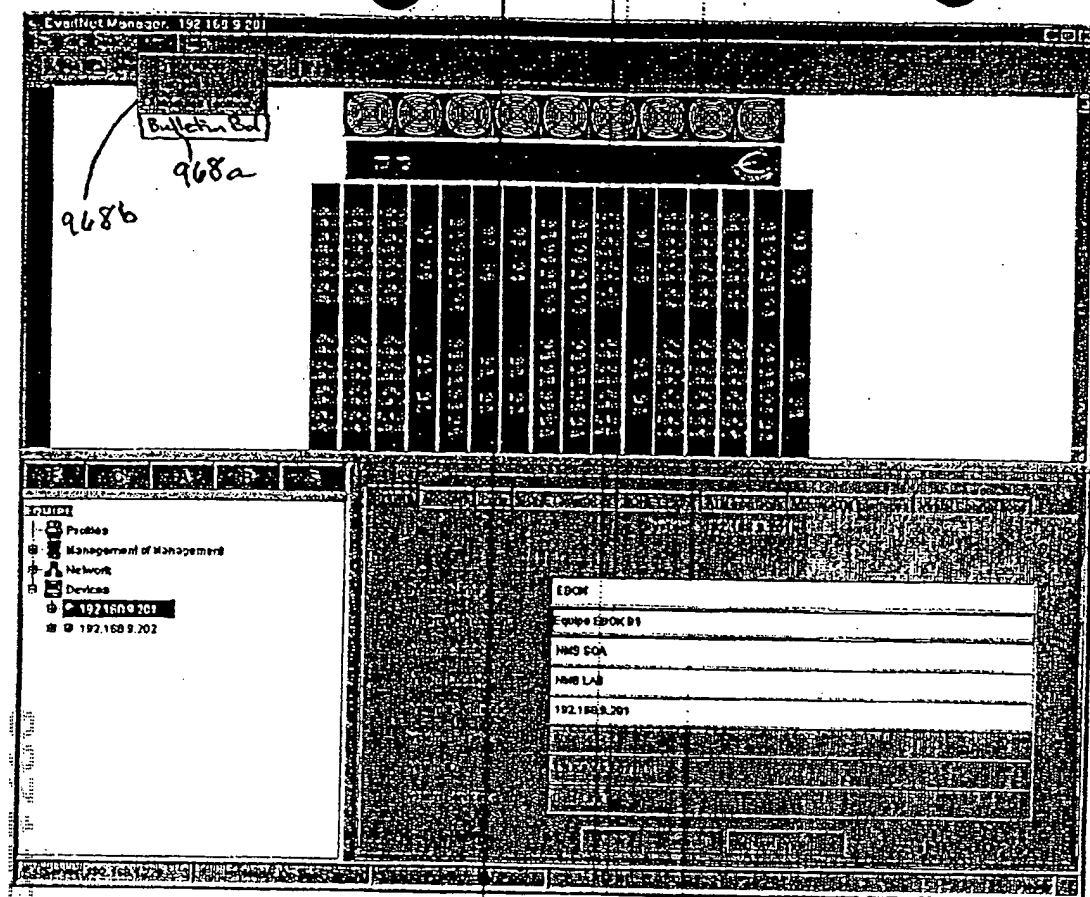
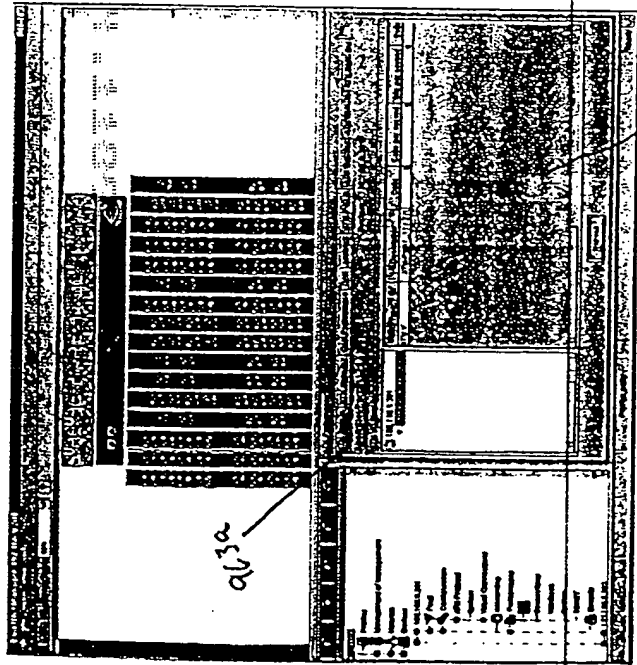


Fig. 9a

895



970a

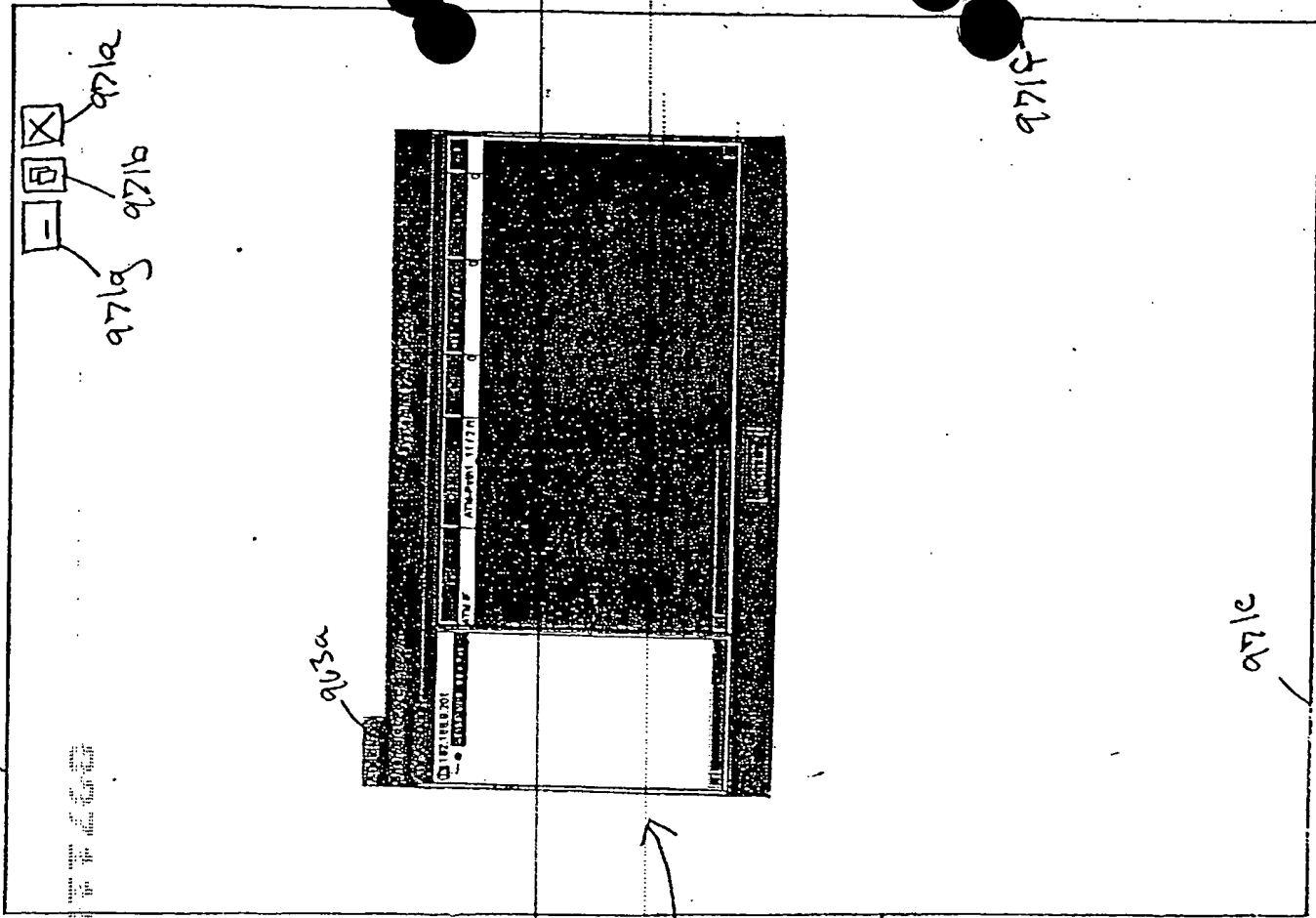
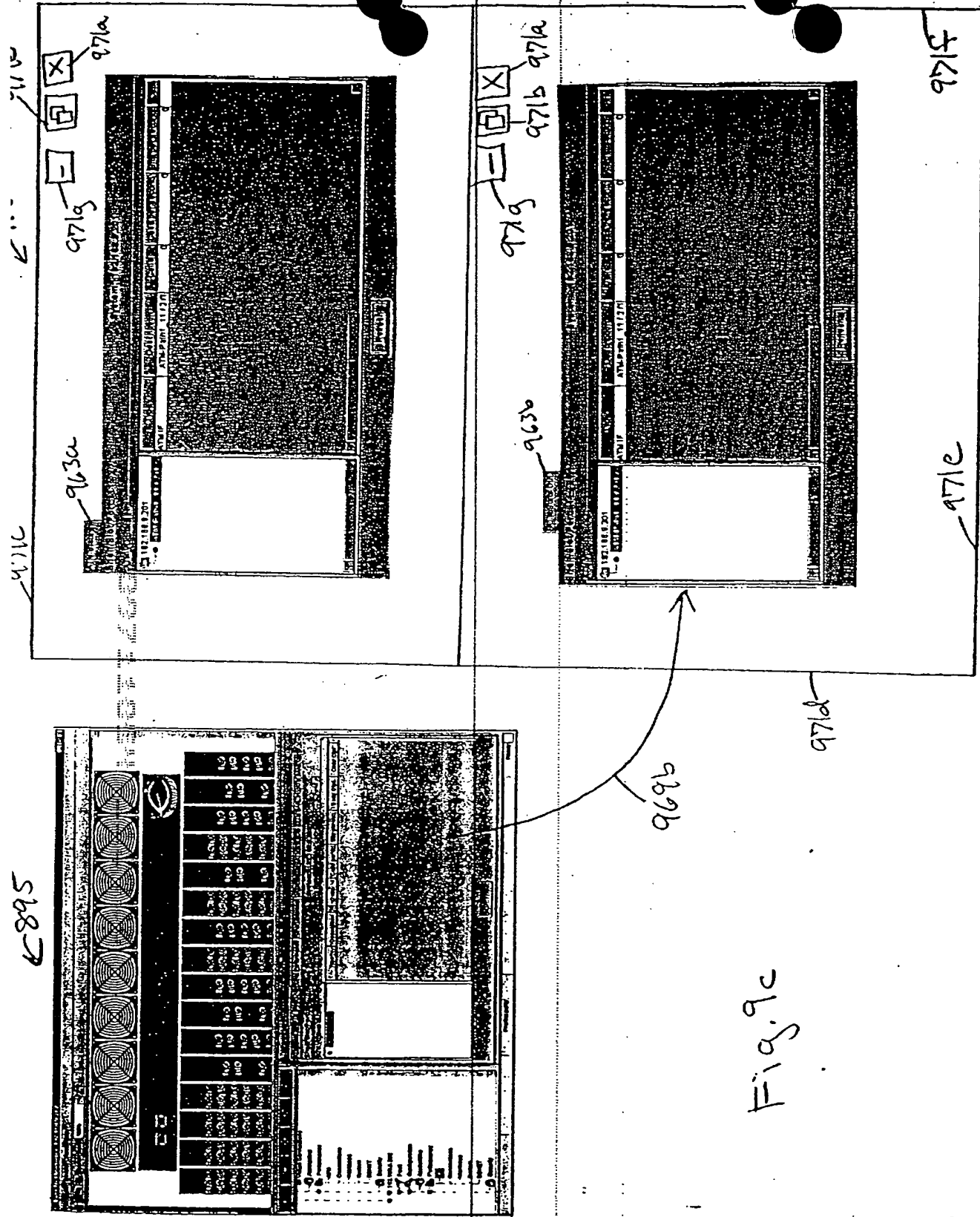
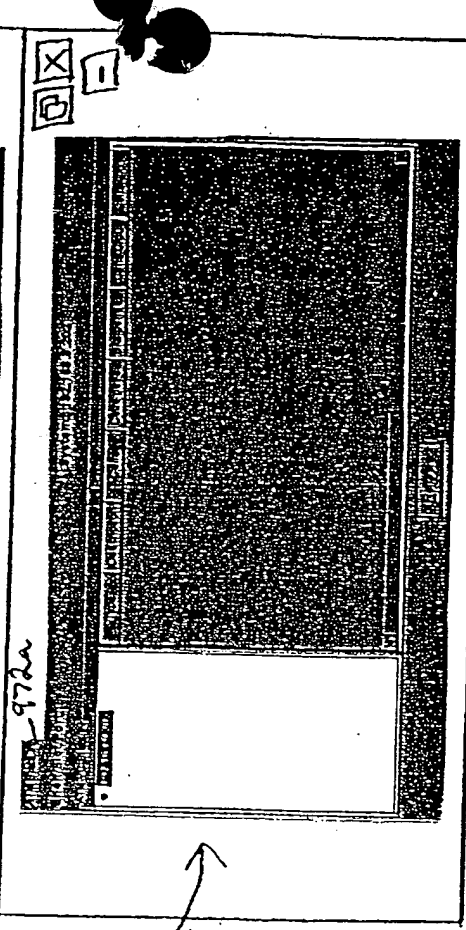
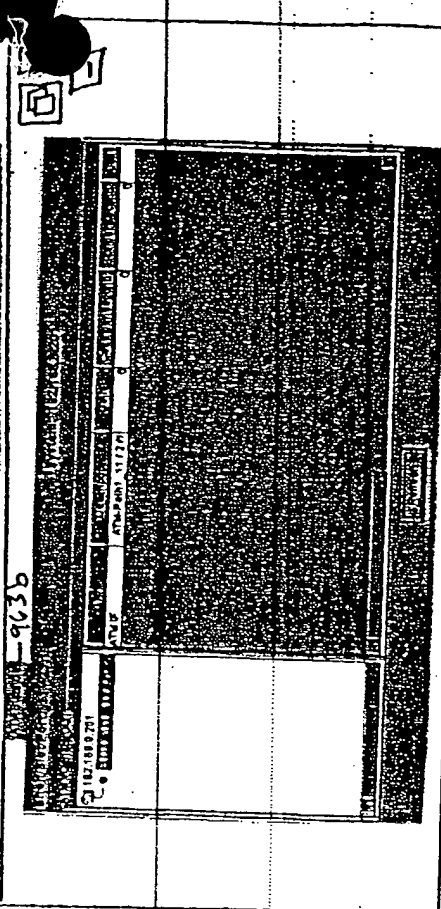
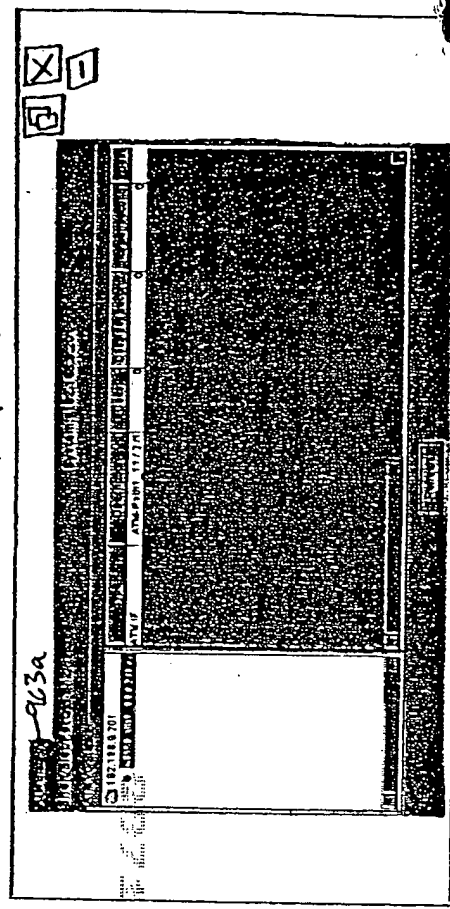
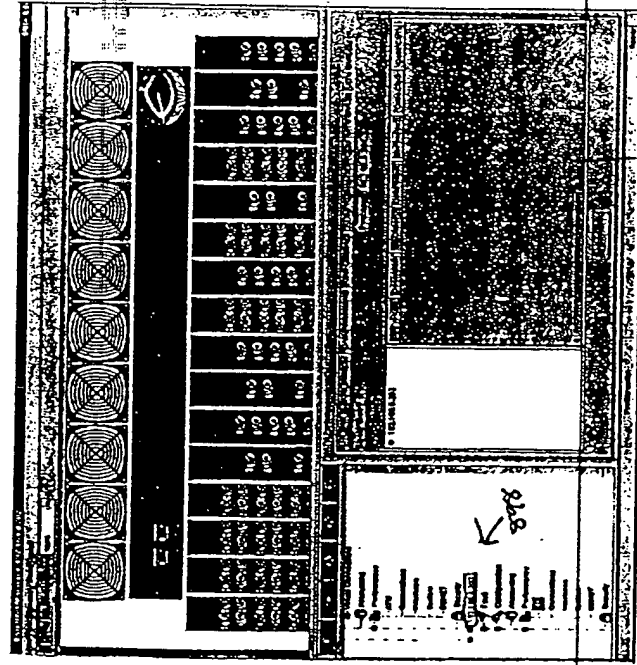


Fig. 9b



9710a

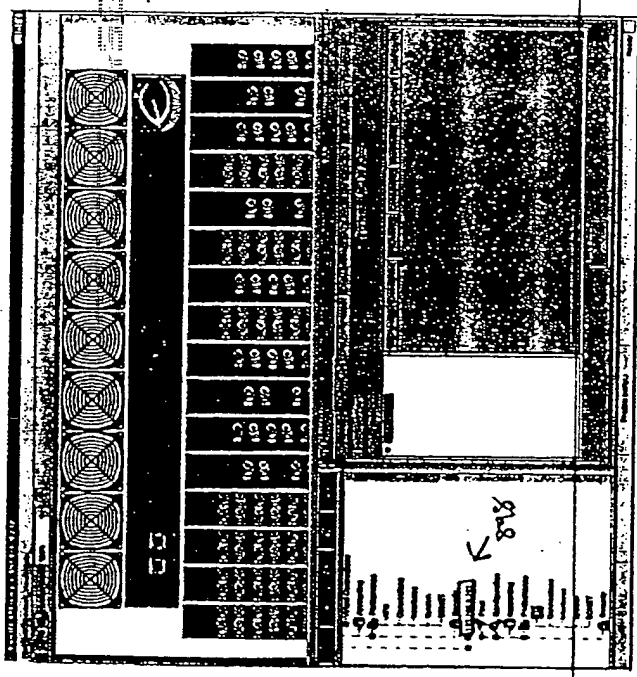


969c

Fig. 9d



← 845



← 1000

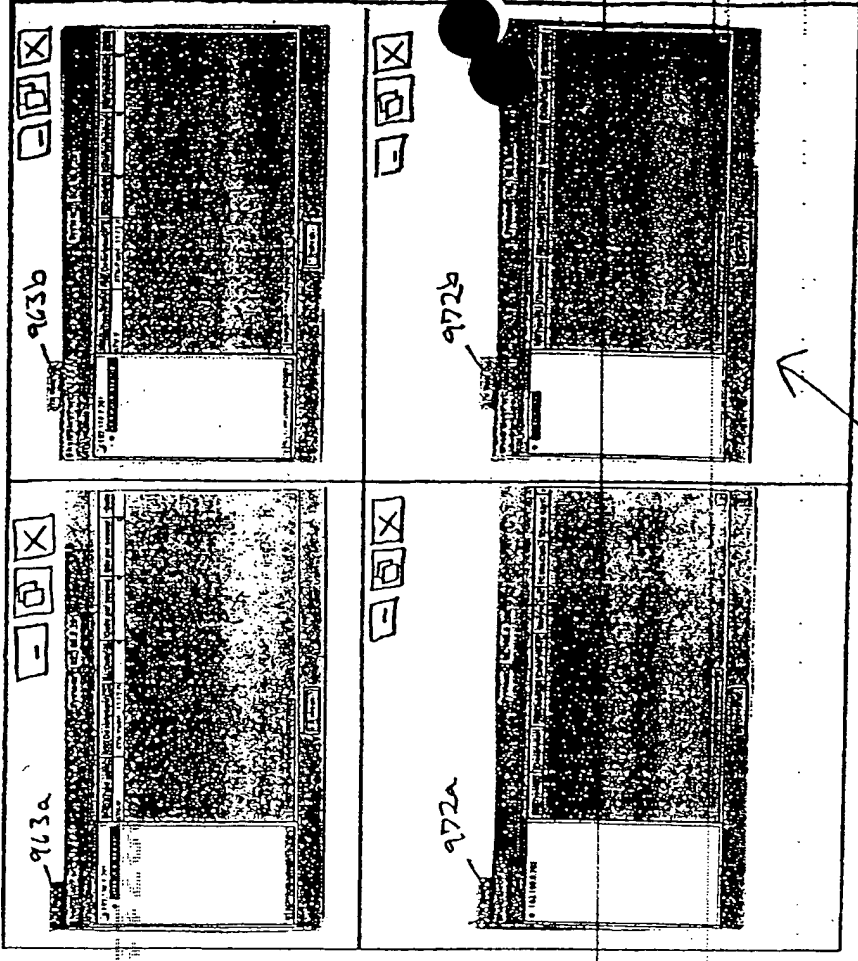


Fig. 9e.

969d

970n

970b

970a

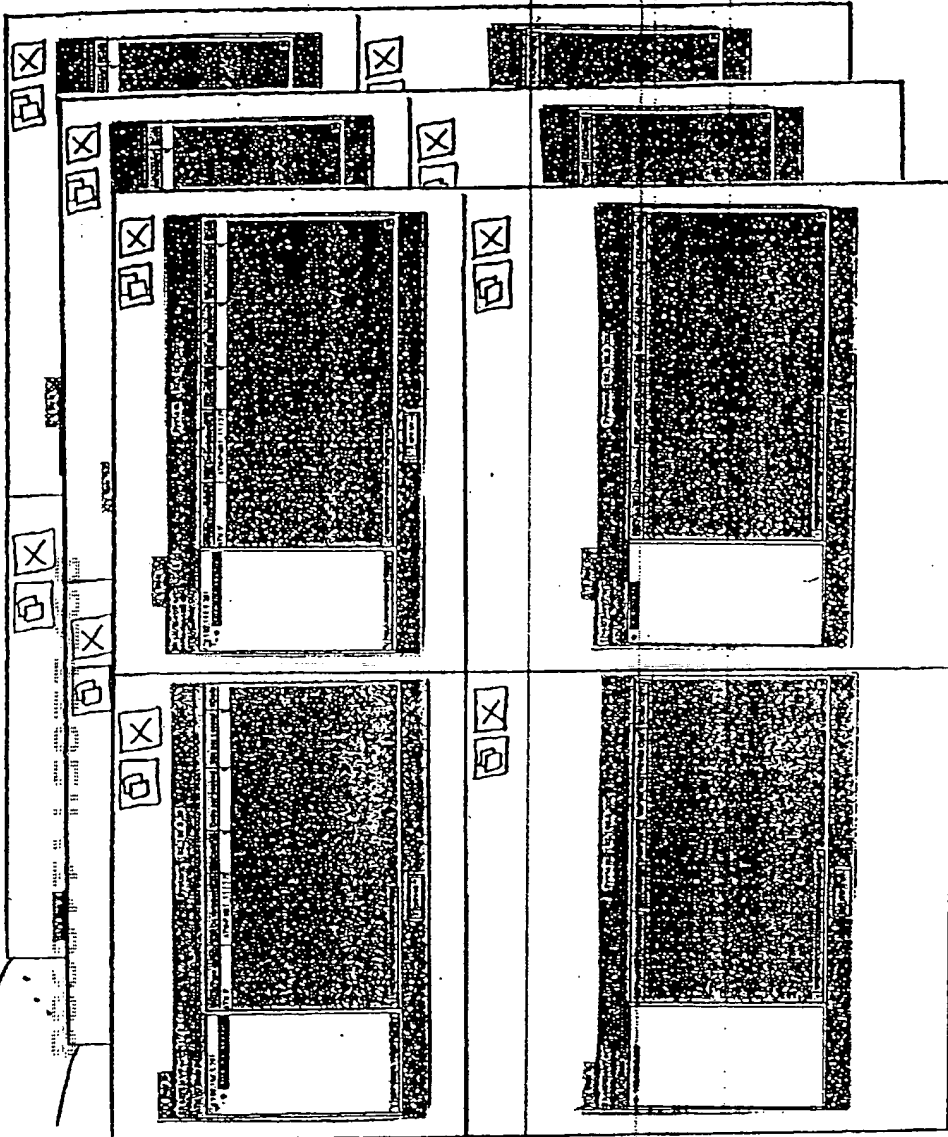
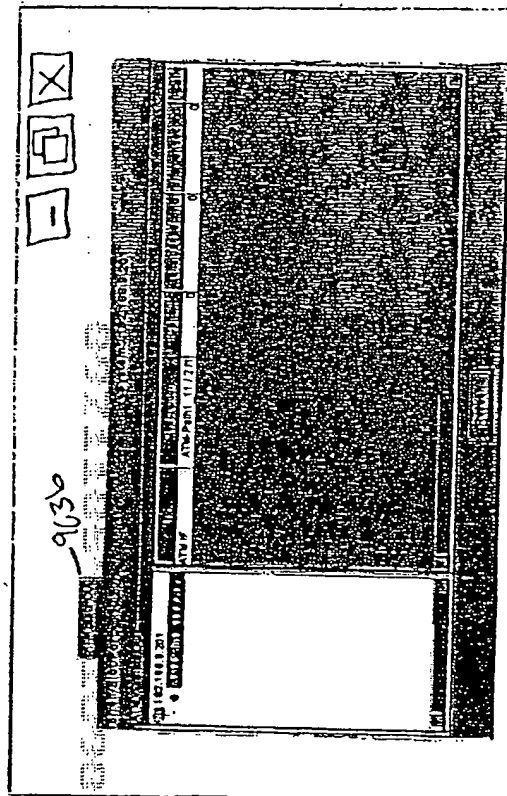
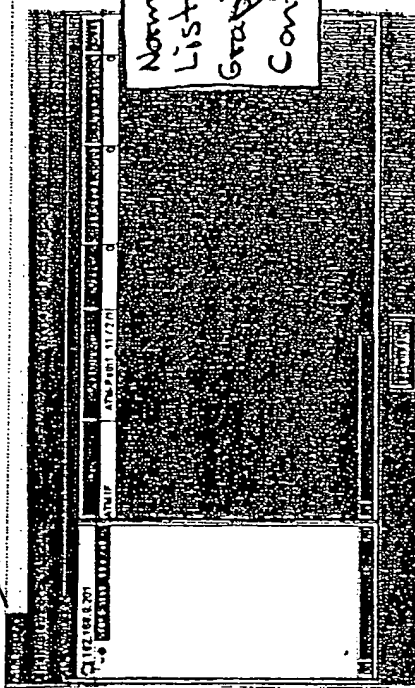


Fig. 9.9f

970a



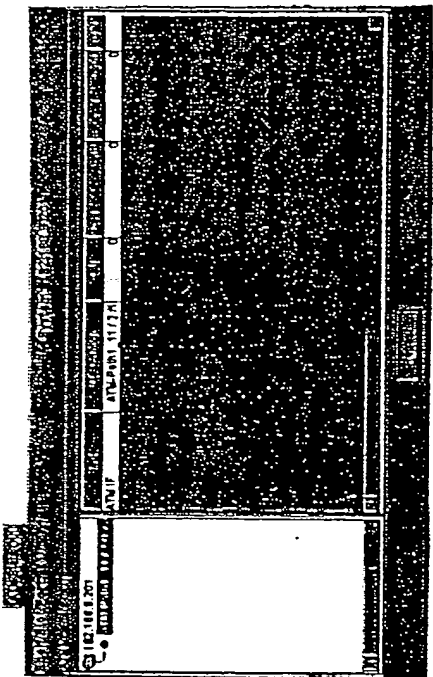
973a



Normal — 973a  
List — 973b  
Graph — 973c  
Config — 973d

Fig. 99

← 100a



System: 192.168.9.201

Type: ATM IF

Description: ATM-Path 1\_11/2/1

Cells:

Cells Per Second:

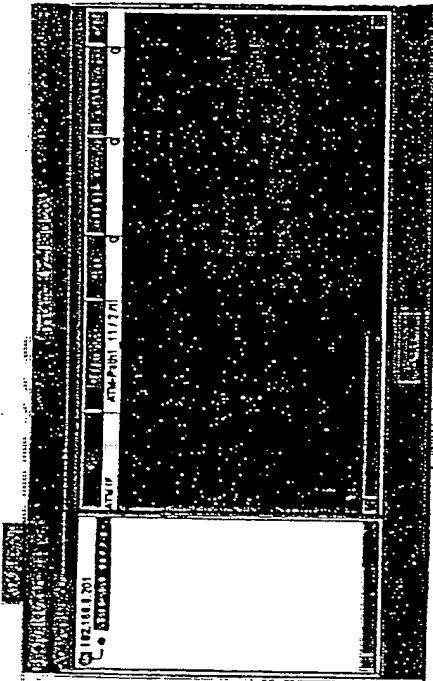
Bits Per Second:

•  
•  
•

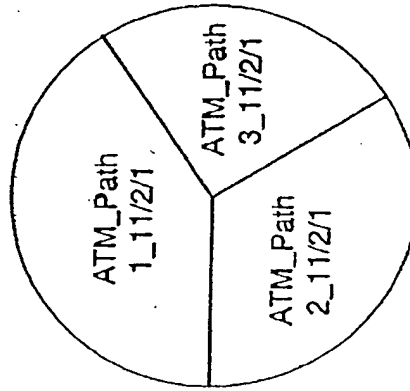
974a

Fig. 9h

↙



Cells Per Second



←9246

Fig. 9i

✓ 1100

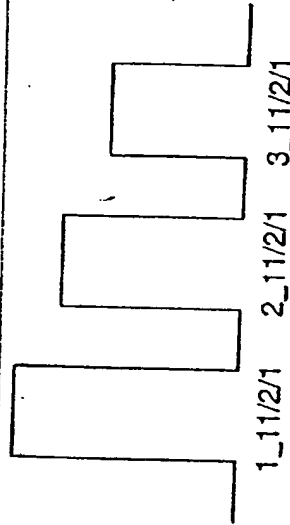
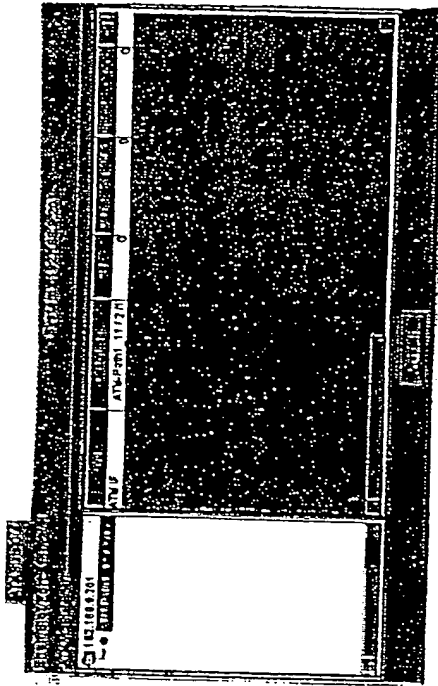
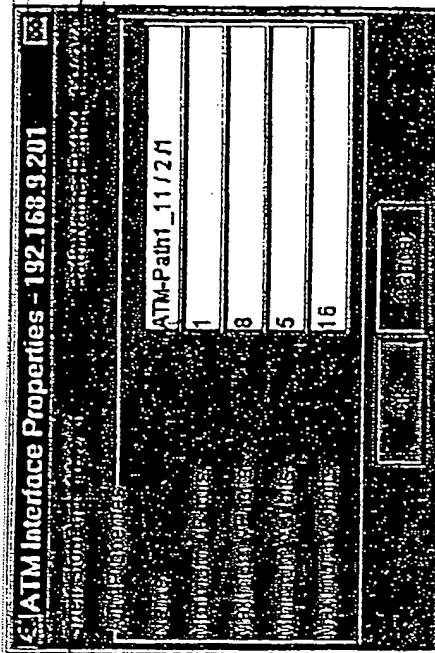
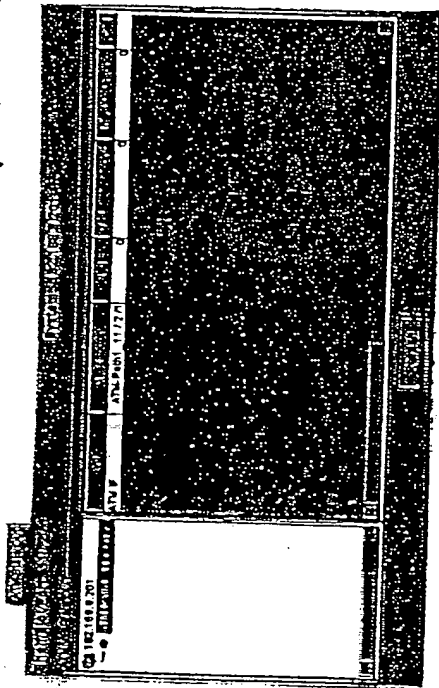


Fig. 9j

✓ 100



9742

Fig. 9K

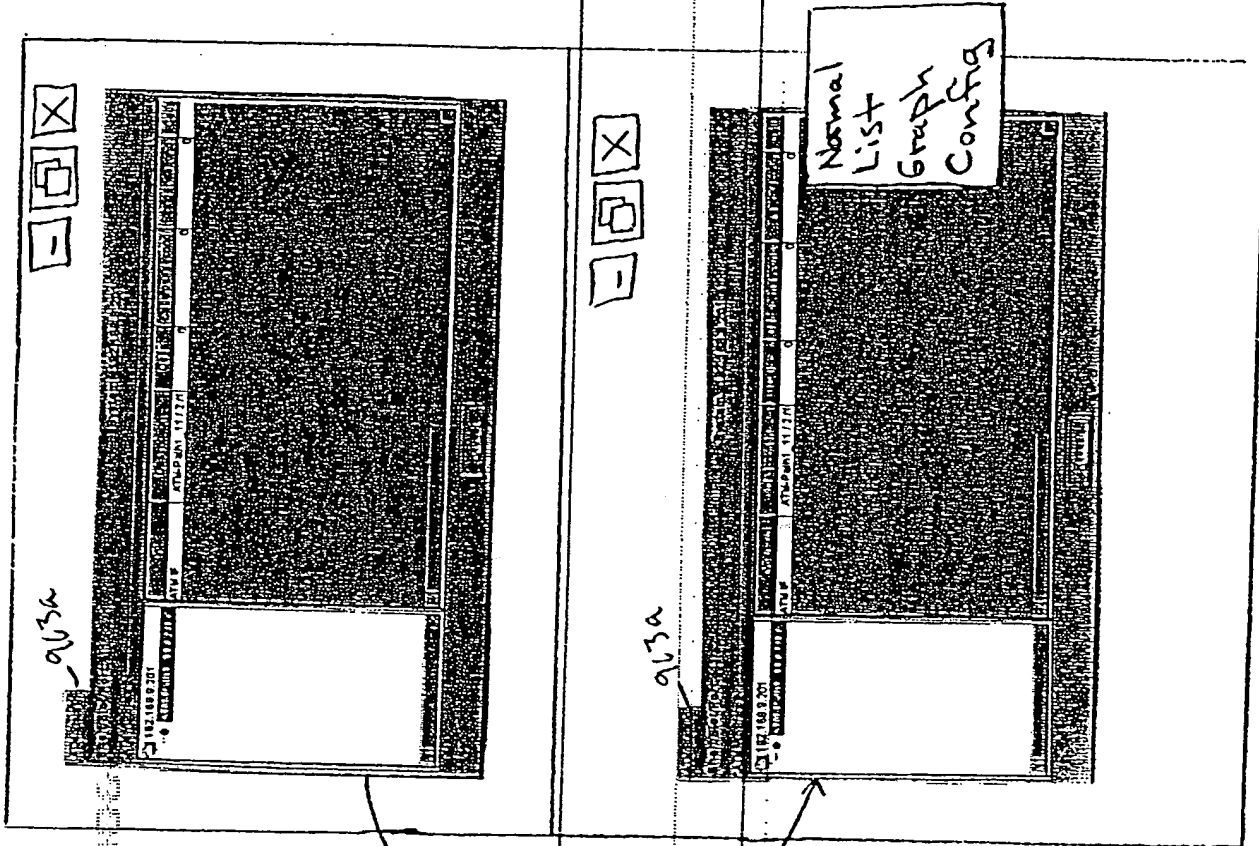


Fig. 91



System: 192.168.9.201

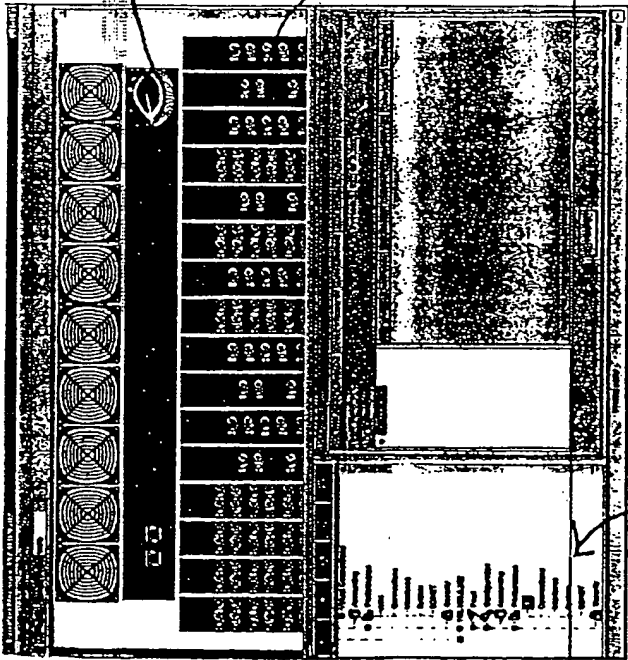
768

25/2/20

897

U.S. 93

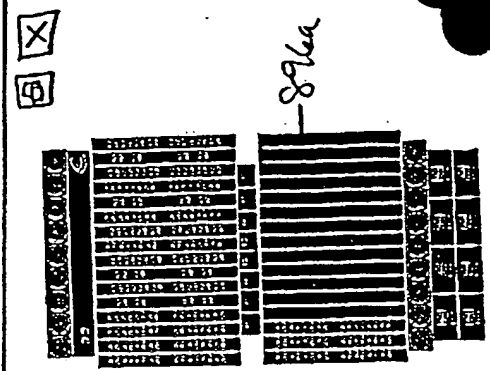
845



975

System:  
192.168.9.201

470a



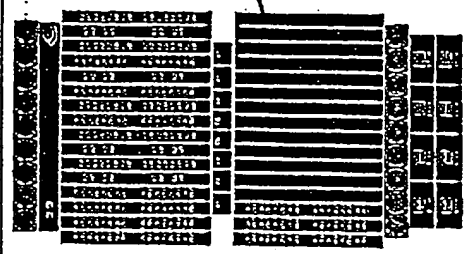
84a



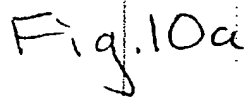
System:  
192.168.9.202

969

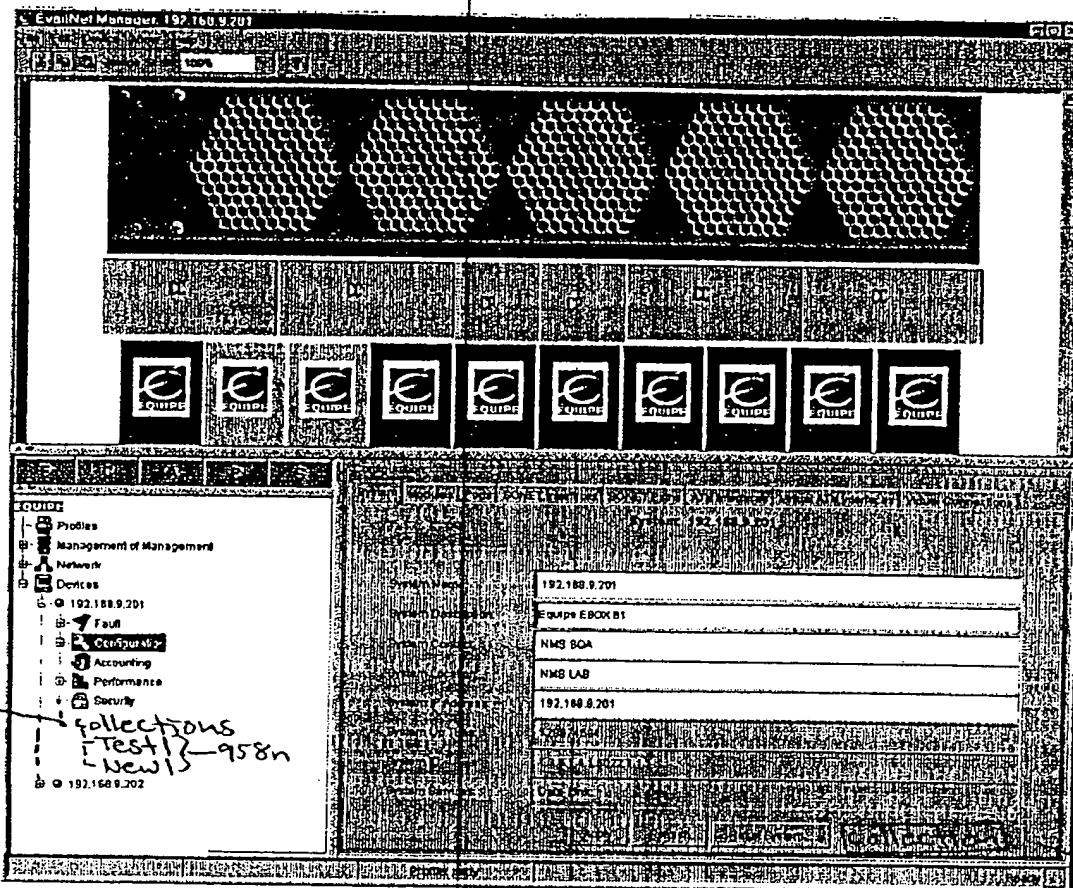
Fig. 9n



975



895



895

Fig. 10b

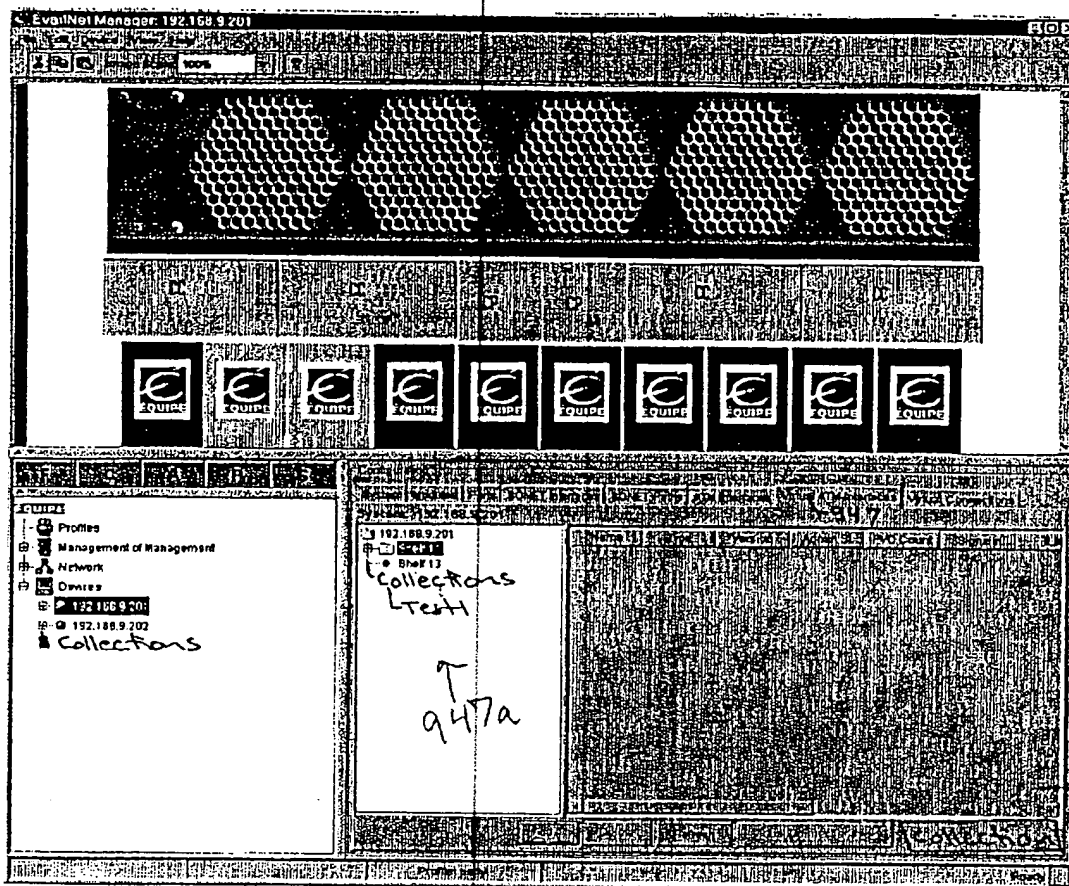
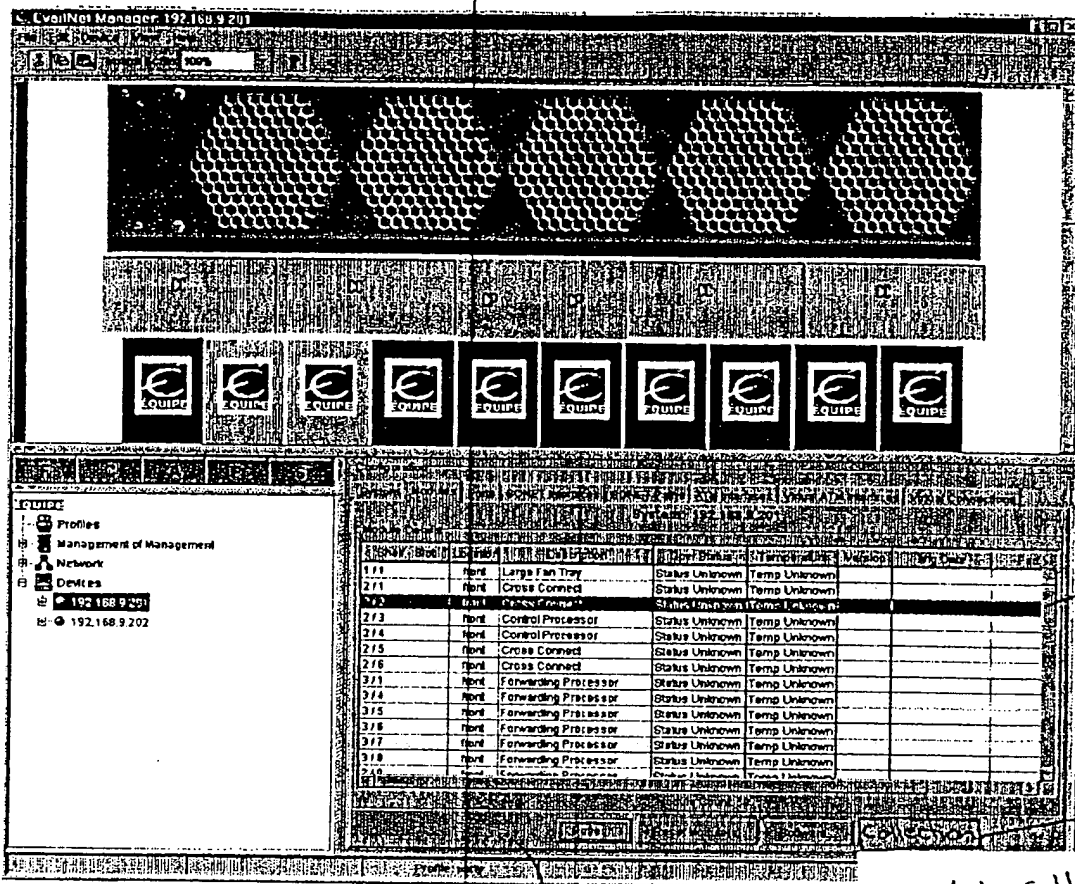


Fig. 10c



Collection Name:

OK

Fig. 10e

Existing Collections:

- Test1
- New1
- Walmart
- Kmart

OK

Fig. 10f

895

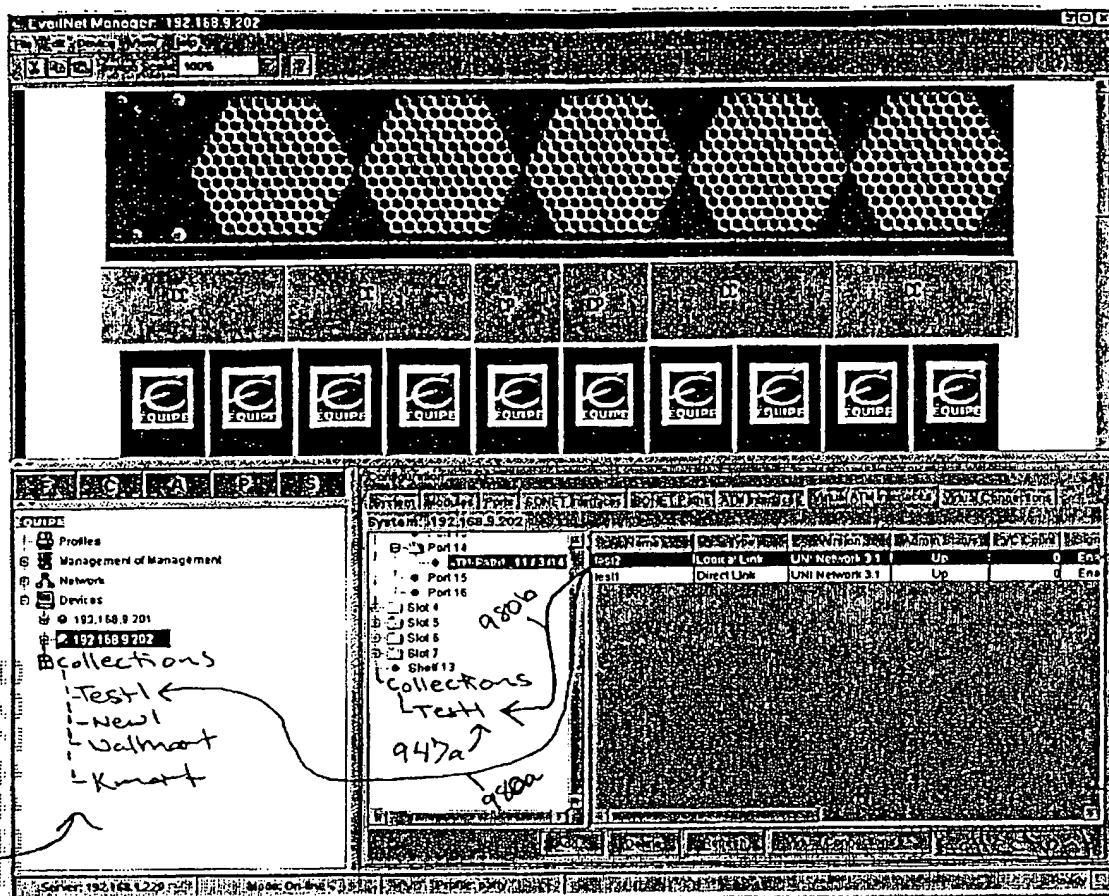


Fig. 109

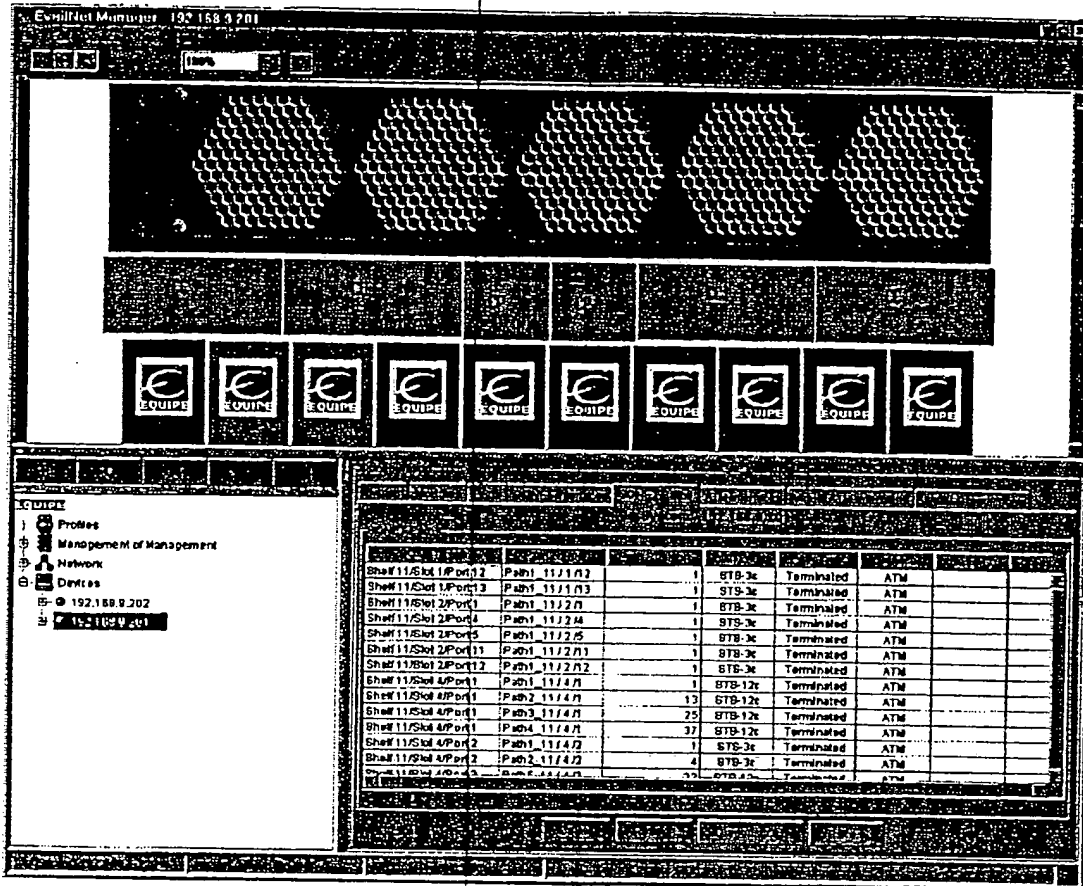
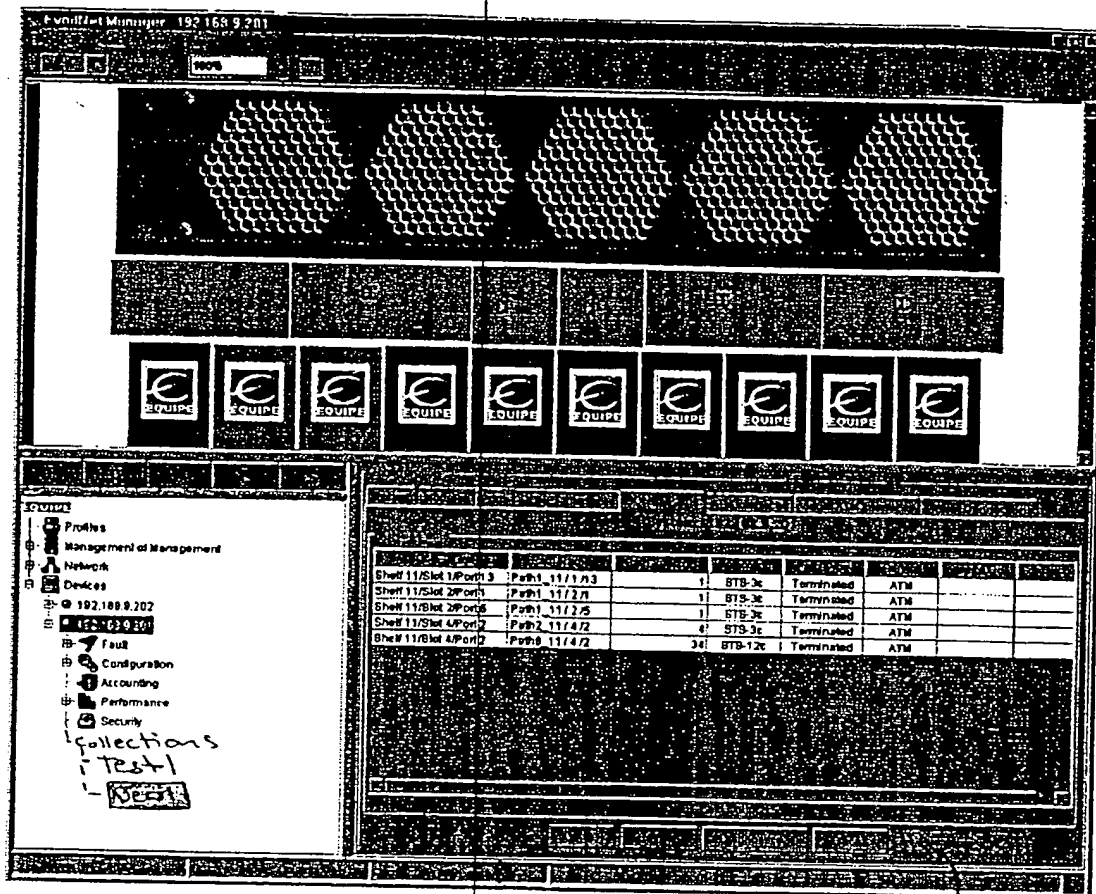


Fig. 10h





982

Fig. 10i

904

Name	Description	Security	Level	Primary Server	Secondary Server
Joe	Joe Whitehouse	Admin	15	192.168.1.32	192.168.1.37
Wayne	Wayne Arano	Promisioner	15	TeamServer1:192.168.1.32	TeamServer2:192.168.1.32

905

906

Fig. 11a

← 907

**General**

Username: Kevin 908a

Description: Kevin Snow user account 908e

Group Name: Equipe 908f

Group Level Access: 908d

Password: \*\*\*\*\* 908b

Confirm Password: \*\*\*\*\* 908c

**Policies**

☒ User Cannot Change Password 908h

☐ Account Disabled 908i

☒ User Can Add Devices 908j

User Session Timeout: 15 908k Minutes

**Servers**

Primary Server: 192.168.1.220 908l

Primary Server Port: 6500 908n

Secondary Server: 192.168.1.221 908m

Secondary Server Port: 6503 908o

**Devices**

Device	READ	READWRITE	Relay	Timeout	
192.168.9.202	public	equipe	3	5	908g
192.168.9.205	public	equipe	3	5	
192.168.9.216	public	equipe	3	5	

908r 908s 908t

OK Cancel

Fig. 11b

Fig. 11c

General Policies Servers Devices

Primary Server: 192.168.1.220

Primary Server Port: 6500

Secondary Server: 192.168.1.205

Secondary Server Port: 6503

OK Cancel

9084

General Policies Servers Devices

Device	READ	READ/WRITE	Retry	Timeout	Trap Port
192.168.9.202	public	equipe	3	5	162
192.168.9.205	public	equipe	3	5	162
192.168.9.216	public	equipe	3	5	5012

Add Delete

OK Cancel

9084

Fig. 11d

Fig. 11e

General Policies Servers Devices

Username: Kevin

Description: Kevin Snow user account

Customer Name: Equipe

Group Level Access: ▼

Password: \*\*\*\*\*

Confirm Password: \*\*\*\*\*

OK Cancel

9084

General Policies Servers Devices

☒ User Cannot Change Password

☐ Account Disabled

☒ User Can Add Devices

User Session Timeout: 15 Minutes

OK Cancel

9084

Fig. 11f

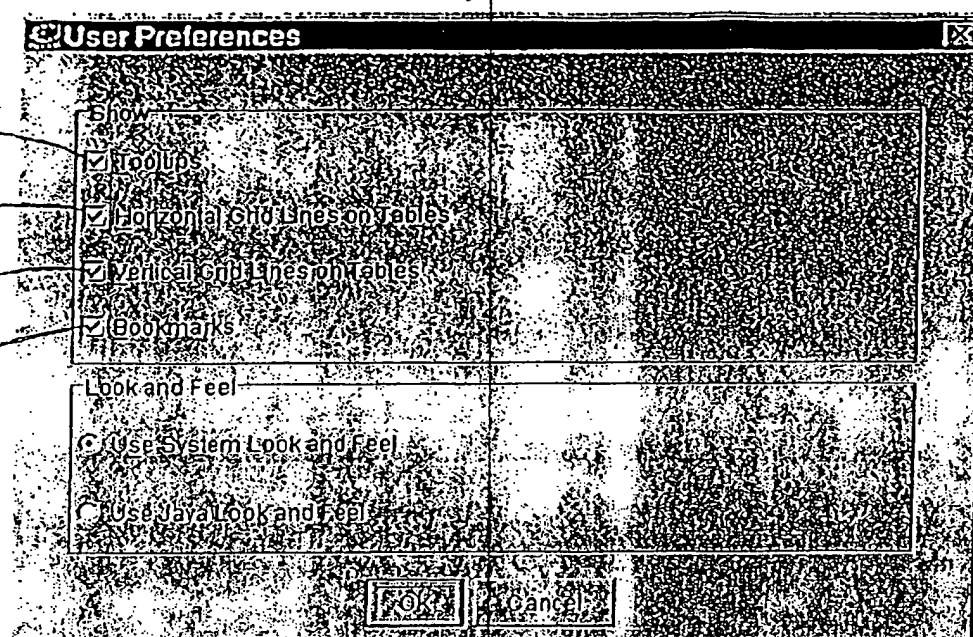


Fig. 11g

907

General

Username: Kevin 908a

Description: Kevin Snow user account 908e

Group Name: Equipe 908f

Group Level Access: 908d

Password: \*\*\*\*\* 908b

Confirm Password: \*\*\*\*\* 908c

Policies

☒ User Cannot Change Password 908h

☐ Account Disabled 908i

☒ User Can Add Devices 908j

User Session Timeout: 15 908k Minutes

Servers

Primary Server: 192.168.1.220 908l

Primary Server Port: 6500 908n

Secondary Server: 192.168.1.221 908m

Secondary Server Port: 6503 908o

Devices

Device	READ	READWRITE	Relay	Timeout	
192.168.9.202	public	equipe	3	5	
Group List					
19	Walmart-East				
	Walmart-West				
	Kmart 1				
	Seas-northeast				

908g

1000a

1000

908p

908q

908r

908s

Fig. 11h

Fig. 11i

1002

EvailNet Manager: SONET Path Configuration - 11 / 8 / 5

SONET Path Configuration

Path Name: Path1\_11/8/5

Path ID: 1

Path Type: STS-3c

Path Status: Terminated

Path Description: ATM

Path Configuration

Path Name: Path1\_11/8/5

Path ID: 1

Path Type: STS-3c

Path Status: Terminated

Path Description: ATM

Path Configuration

Path Name: Path1\_11/8/5

Path ID: 1

Path Type: STS-3c

Path Status: Terminated

Path Description: ATM

1002a

1002c

1002d

1002b

1002c

1002

EvailNet Manager: SONET Path Configuration - 11 / 8 / 5

SONET Path Configuration

Path Name: Path1\_11/8/5

Path ID: 1

Path Type: STS-3c

Path Status: Terminated

Path Description: ATM

Path Configuration

Path Name: Path1\_11/8/5

Path ID: 1

Path Type: STS-3c

Path Status: Terminated

Path Description: ATM

Path Configuration

Path Name: Path1\_11/8/5

Path ID: 1

Path Type: STS-3c

Path Status: Terminated

Path Description: ATM

1002a

1002d

1002b

1002c

Fig. 11j



Fig. 11K

1002

EvailNet Manager: SONET Path Configuration - 11 / 8 / 5

SONET Path Configuration

Path Name: Path1\_11/8/5

Path Type: STS-3c

Path Length: 1

Path Status: STS-3c

Path Description: STS-3c

Path Name	Path Type	Path Length	Path Status	Path Description
Path1_11/8/5	STS-3c	1	STS-3c	STS-3c
Path2_11/8/5	STS-3c	4	STS-3c	STS-3c
Path3_11/8/5	STS-3c	7	STS-3c	STS-3c

1002a

1002b

1002c

Add V-ATM Interface - 192.168.9.201

Path Name: Path2\_11/8/5

Interface Parameters

Name: V-ATM

Configuration Type: Direct Link

UNI Network: UNI Network 3.1

Path Status: Up

1004

1004a

1004b

1004c

Fig. 11n

Fig. 11L

**Managed Resource Group Table**

1008

1008b

1008a	LID	Managed Device PID	Group Name	1008c
	1145	1	Walmart-East	1008d
	⋮	⋮	⋮	

Fig. 11M

**Managed Resource Table**

1007

1007b

1007a	LID	Resource LID	Manage Resource Group LID	1007c
	4443	901	1145	
	⋮	⋮	⋮	

1006

ÉvailNet Manager: 192.168.9.201 - Virtual Connection Wizard

Source: 192.168.9.201 Destination: 192.168.9.201

**Source Point:**

- 192.168.9.201
  - Shelf 11
    - Slot 1
    - Slot 2
    - Slot 3
    - Slot 4
      - Port 1
      - Port 2
        - ATM-Path2 11/4/2

**Destination Point:**

- 192.168.9.201
  - Shelf 11
    - Shelf 13

**Connection Parameters**

Connection Name:

Admin Status: Up

Group Name:

**End Point 1 Parameters**

VP:  ☐ Use Any VP Value

VCI:  ☐ Use Any VCI Value

Transmit Frame Descriptor:

Receive Frame Descriptor:

☒ Use the same Frame Descriptor for both Transmit and Receive

**End Point 2 Parameters**

VP:  ☐ Use Any VP Value

VCI:  ☐ Use Any VCI Value

Transmit Frame Descriptor:

Receive Frame Descriptor:

☒ Use the same Frame Descriptor for both Transmit and Receive

1006a

1006b

1006c

Fig. 110

Fig. 11p

1010

User Table

1010a	1010b			1010c	
	LID	Username	Password	Group	Level
	Access				
	2012	Dave	Marble	Provisioner	1010d
	⋮	⋮	⋮		1010e

Fig. 11q

1012

User Managed Device Table

1012a	1012b		1012c		1012d		1012e	
	LID	User LID	Host LID	Retry	Timeout			
	7892	2012	9046					
	⋮	⋮	⋮	⋮	⋮			

Fig. 11r

1014

Administration Managed Device Table

1014a	1014b		1014c		1014d		1014d	
	LID	Host Address	Port Address	Retry	Timeout	Admin. Password	Prov. Password	Viewer Password
	9046	192.168.9.202	1521			team 1	team 2	team 3
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

Fig. 11s

1013

↙

Add Delete DeviceDlg

X

1013a — Device Host: 192.168.1.202

1013b — Device Port: 1521

1013c — SNMP Retry:

1013d — SNMP Timeout:

1013e — Admin. Password:

1013f — Prov. Password:

1013g — Viewer Password:

1013h — Add

OK

Cancel

Delete

1013i

Fig. 11t

User Resource Group Map Table

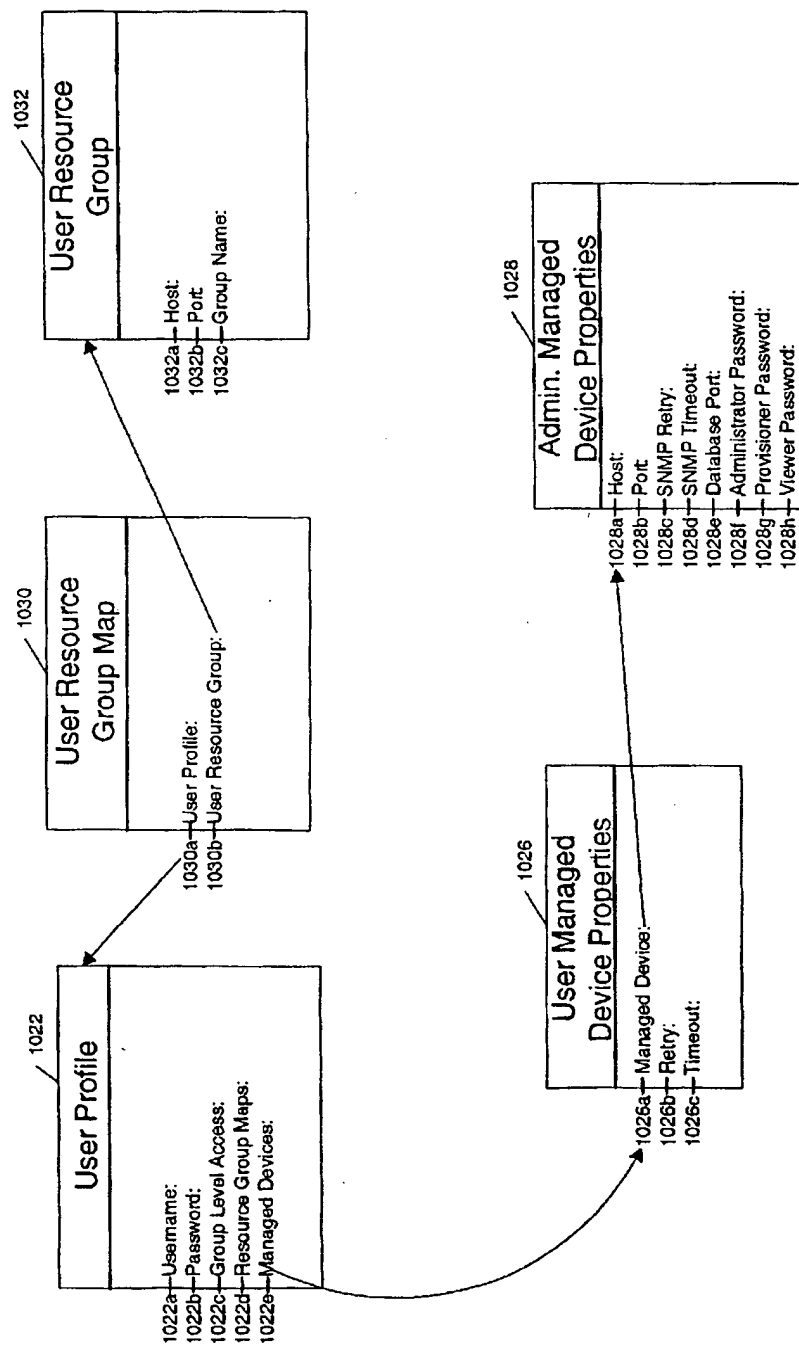
1016a	1016b			1016c	1016
	LID	User LID	User Resource Group LID		
	8086	2012	1024		
	⋮	⋮	⋮		

Fig. 11u

User Resource Group Table

1018d	1018a	1018b	1018c	1018
	LID	Host LID	Group Name	
	1024	9046	Walmart-East	
	⋮	⋮	⋮	

Fig. 11v



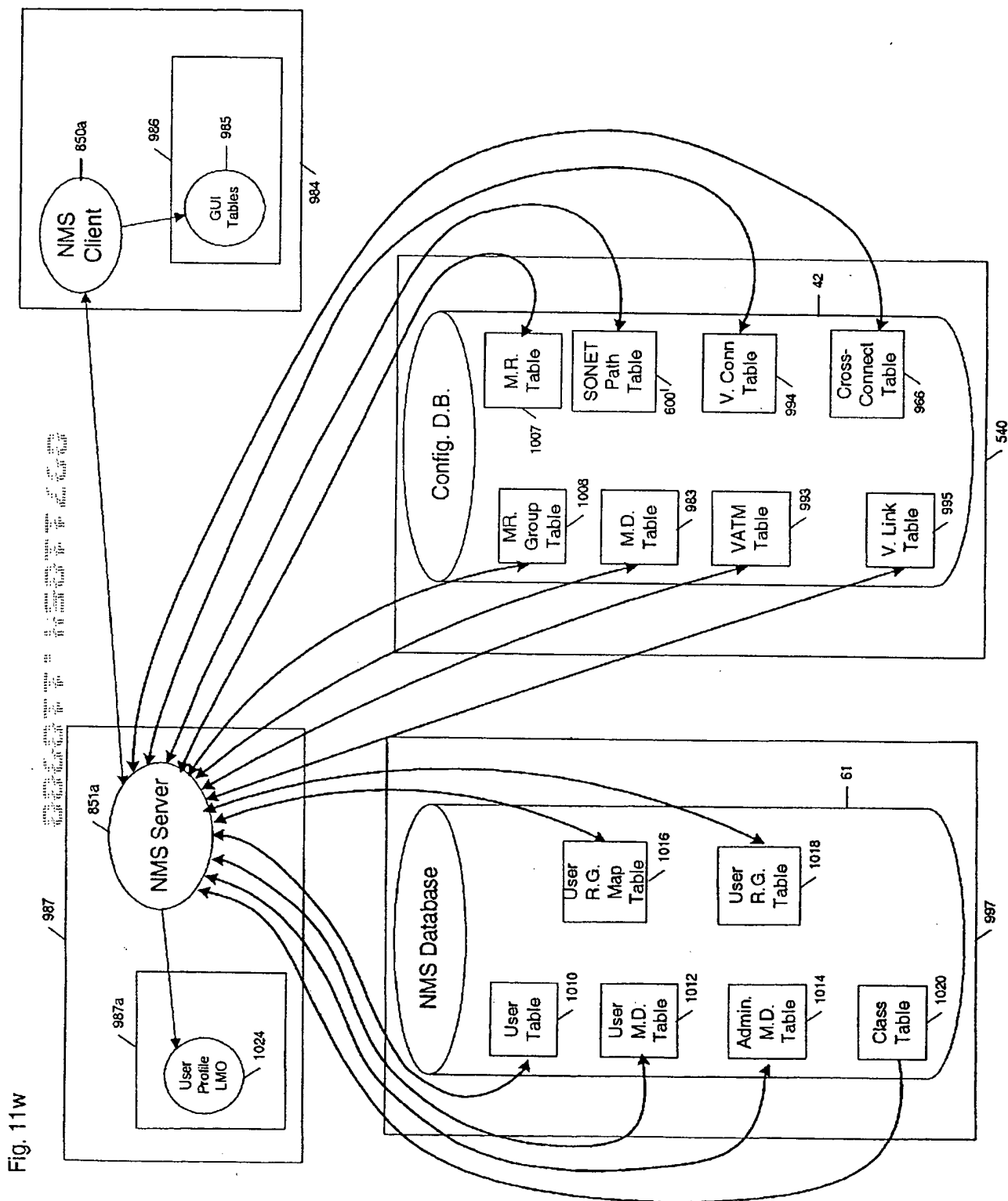




Fig. 11x

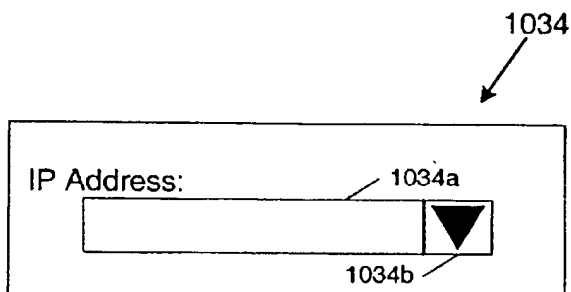


FIG. 12a

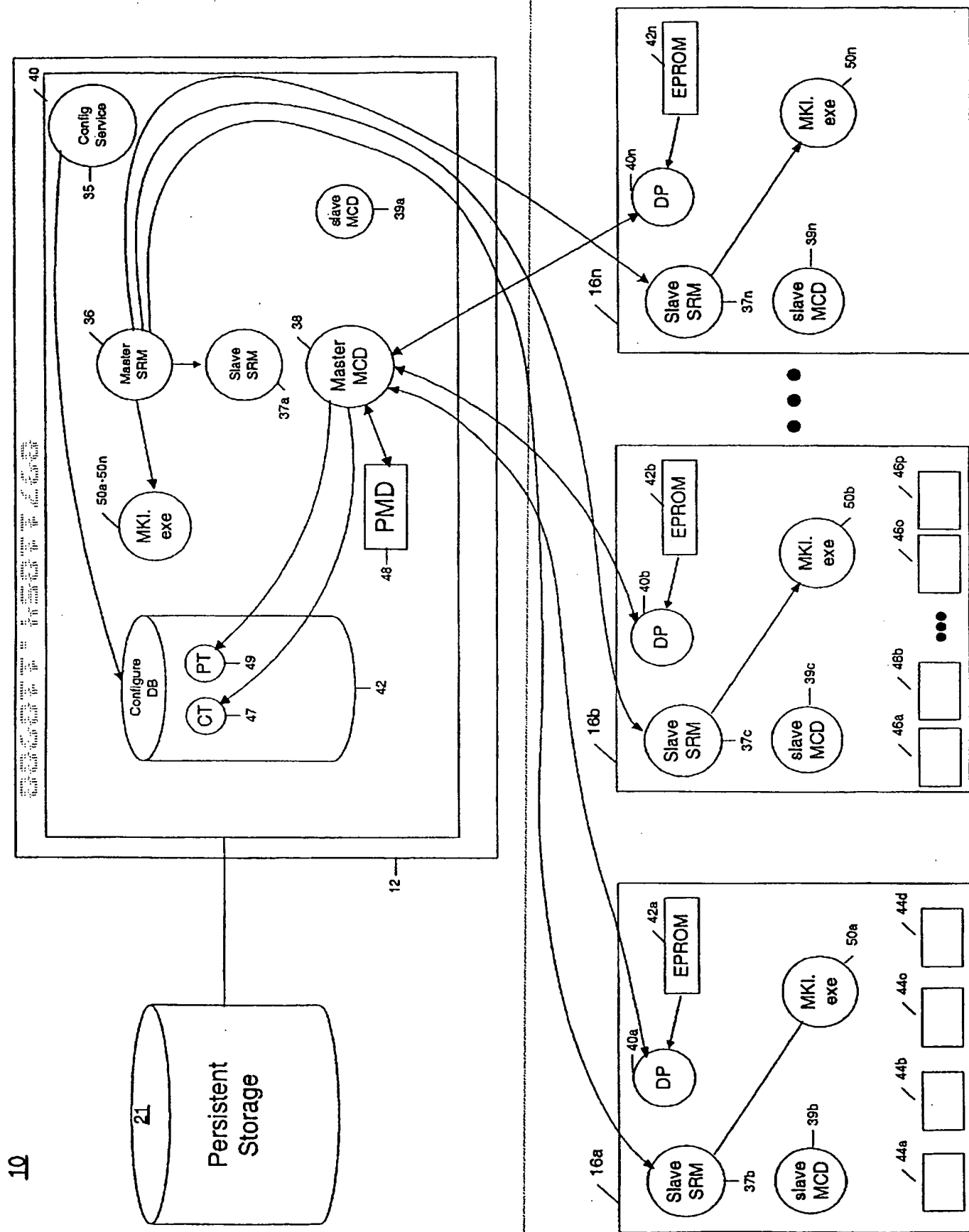


FIG. 12b

# CARD TABLE

47

PID	CWD TYPE	VERSION NO.	SLOT NO.	...
16 a — 500	0XF002	3	1	
16 b — 501	0XF002	4	2	
⋮	⋮	⋮	⋮	⋮
16 e — 505	0X6002	1	5	
⋮	⋮	⋮	⋮	⋮
16 n — 513	0XF002	1	12	
⋮	⋮	⋮	⋮	⋮

FIG. 12b

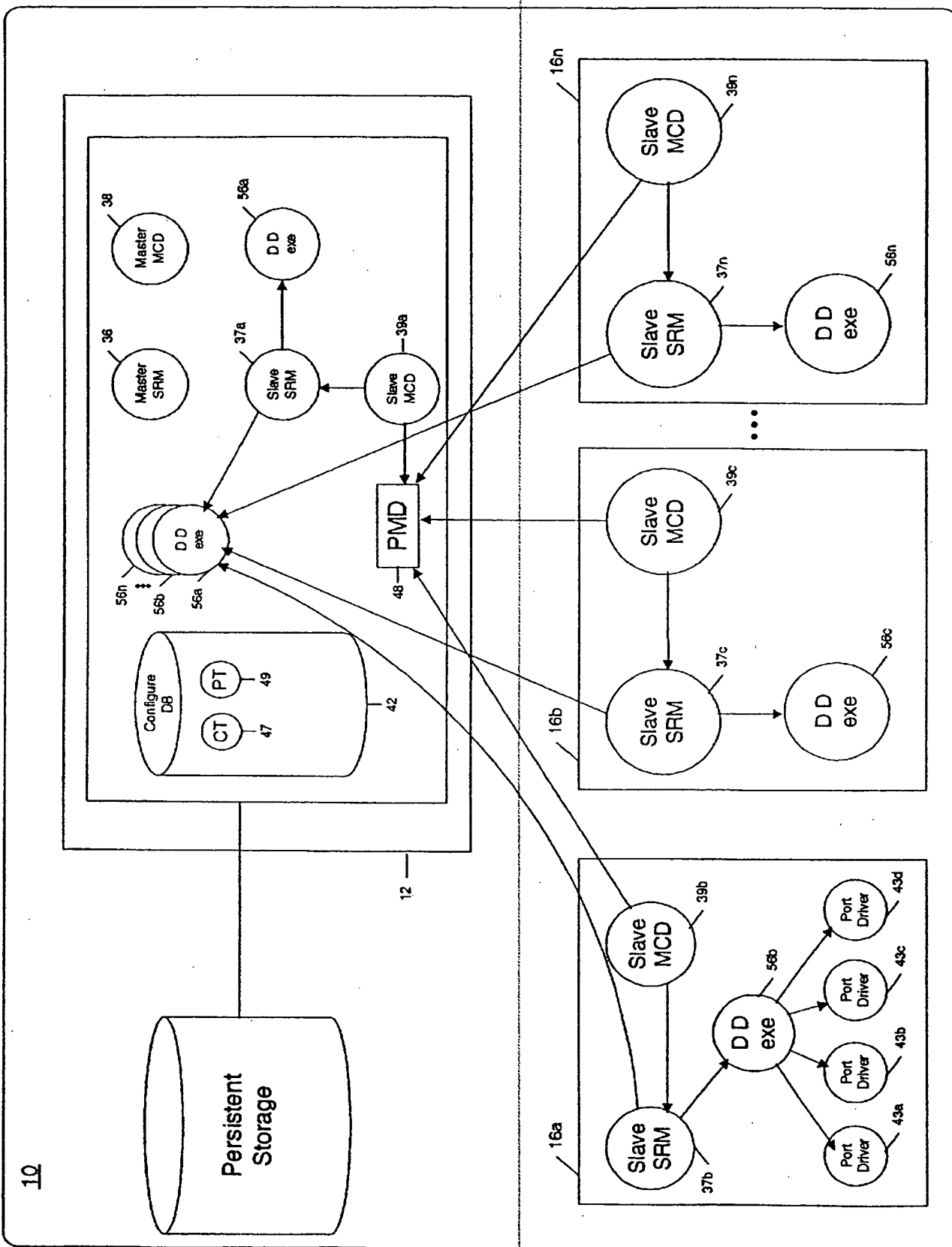
# PORT TABLE

49

PID	PORT TYPE	VERSION NO.	SLOT NO.	...
44a — 1500	00620	1	1	
44b — 1501	00620	1	1	
44c — 1502	00620	1	1	
44d — 1503	00620	1	1	
44a — 1504	00820			
46a — :	:	:	:	:
1600	00620	1	8	
:	:	:	:	:

FIG. 12c

FIG. 13a



**FIG. 13b**

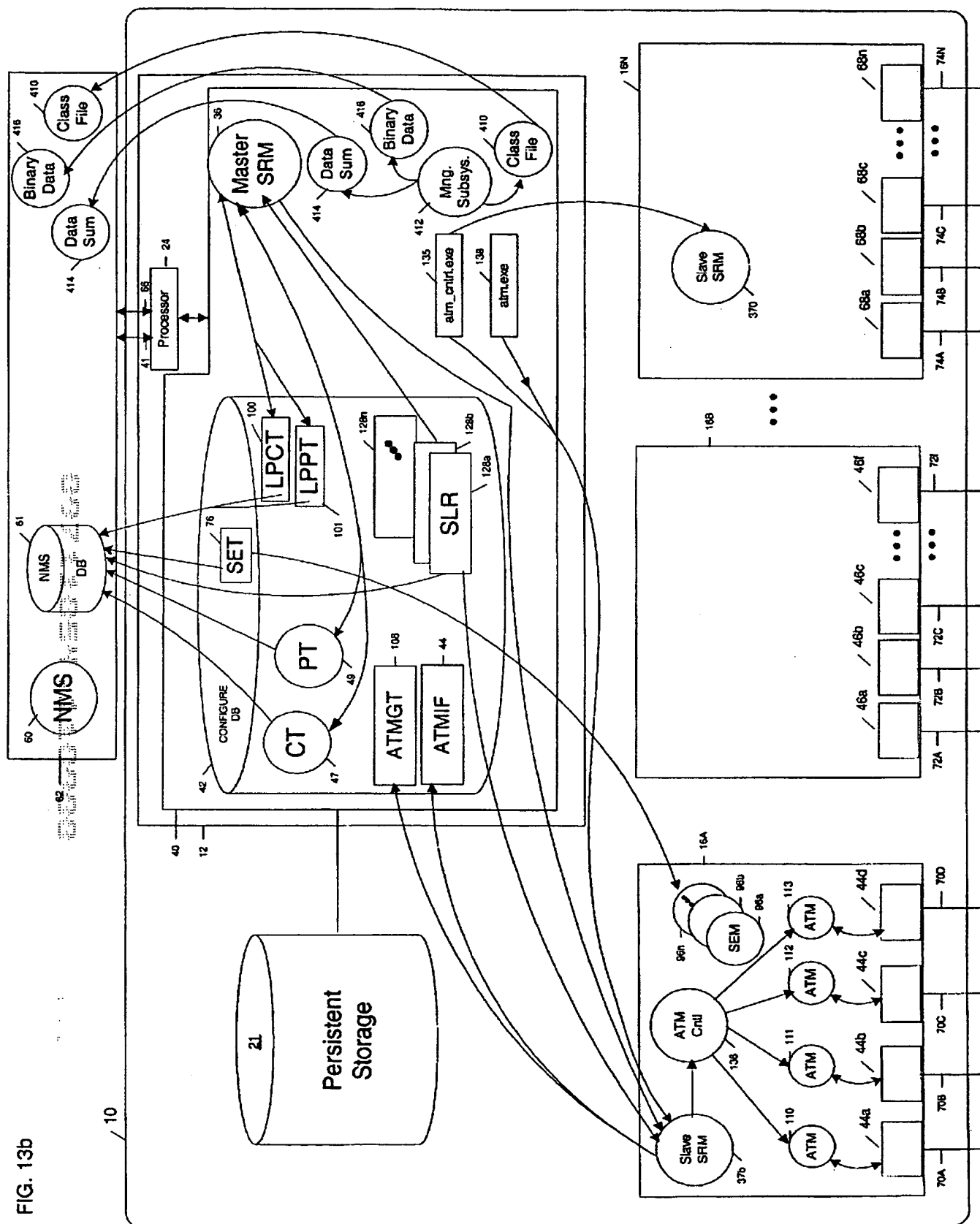


Fig. 13c

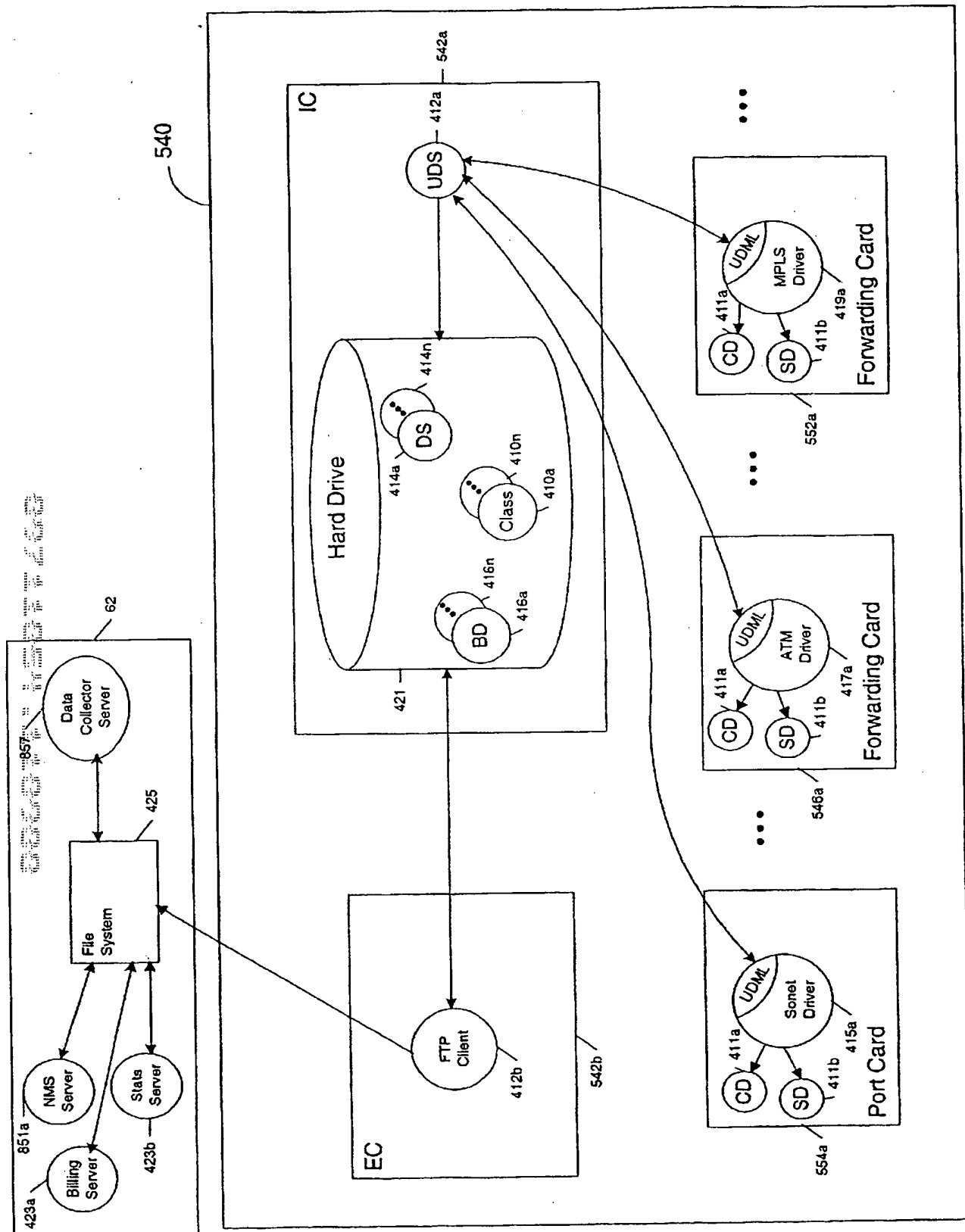


Fig. 13d

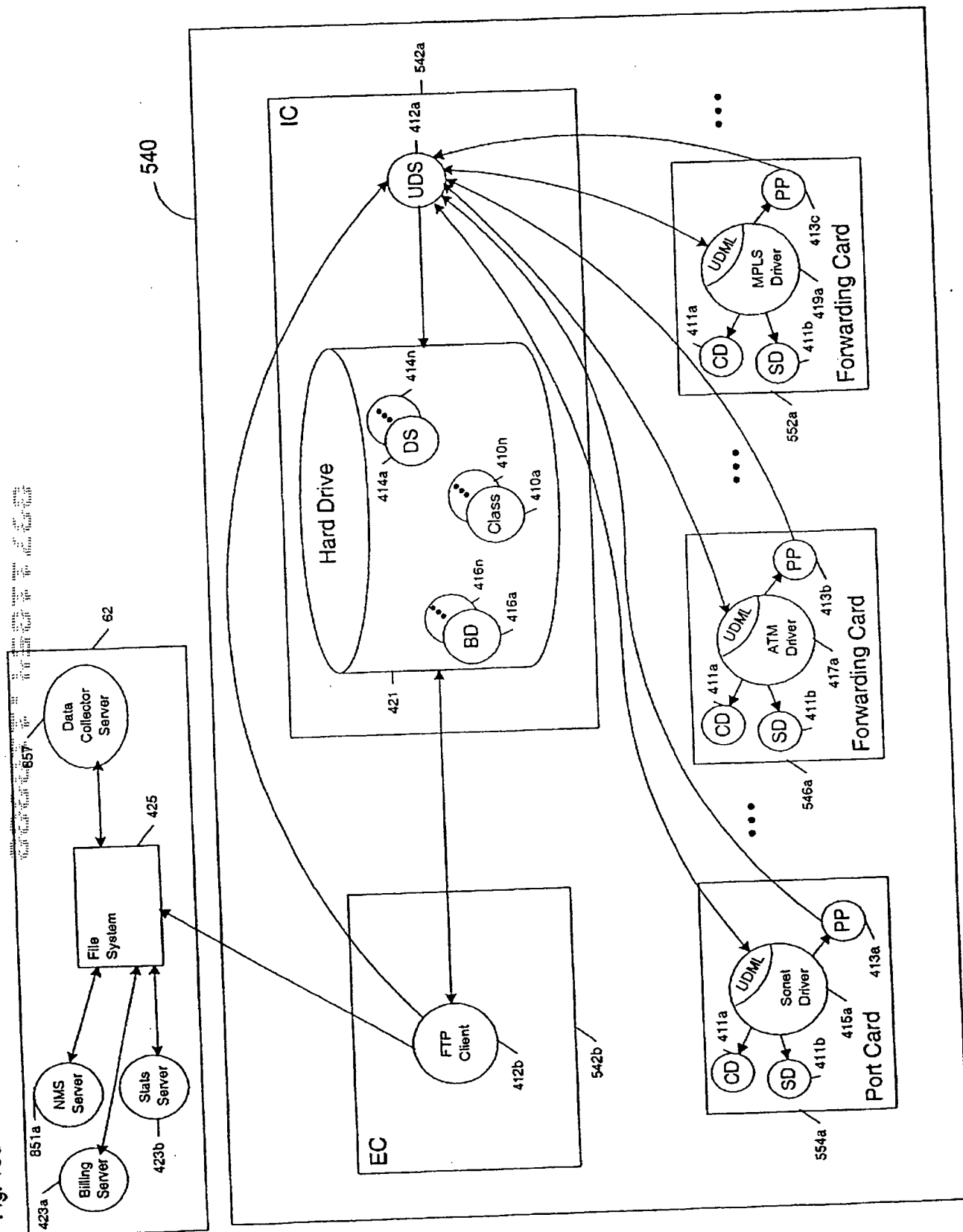




FIG. 14a

Service Endpoint Table 76

	Service Endpoint #	Port PID
78	1	1500
80	2	1501
82	3	1501
84	4	1501
86	5	1502
88	6	1502
90	7	1503
92	8	1503
94	9	1503
168	10	1502
	⋮	⋮

FIG. 14b

Logical to Physical Card Table 100

	LID	Primary PID	Back-up PID
106	30	500	513
109	31	501	513
	⋮	⋮	⋮

FIG. 14c

Logical to Physical Port Table 101

	LID	Primary PID	Back-up PID
107	40	1500	1600
	⋮	⋮	⋮

FIG. 14d

ATM Group Table 108

Group #	Card LID	...
1	30	
2	30	
3	30	
4	30	

FIG. 14e

ATM Interface Table 114

ATM IF	ATM Group	SE	...
1	1	1	
2	1	1	
3	1	1	
4	2	2	
5	2	3	
6	2	4	
⋮	⋮	⋮	⋮
12	3	10	
⋮	⋮	⋮	⋮

FIG. 14f

Software Load Record 128a

130	Control Shim	LID	132
134	atm-cntl.exe	30	

FIG. 15

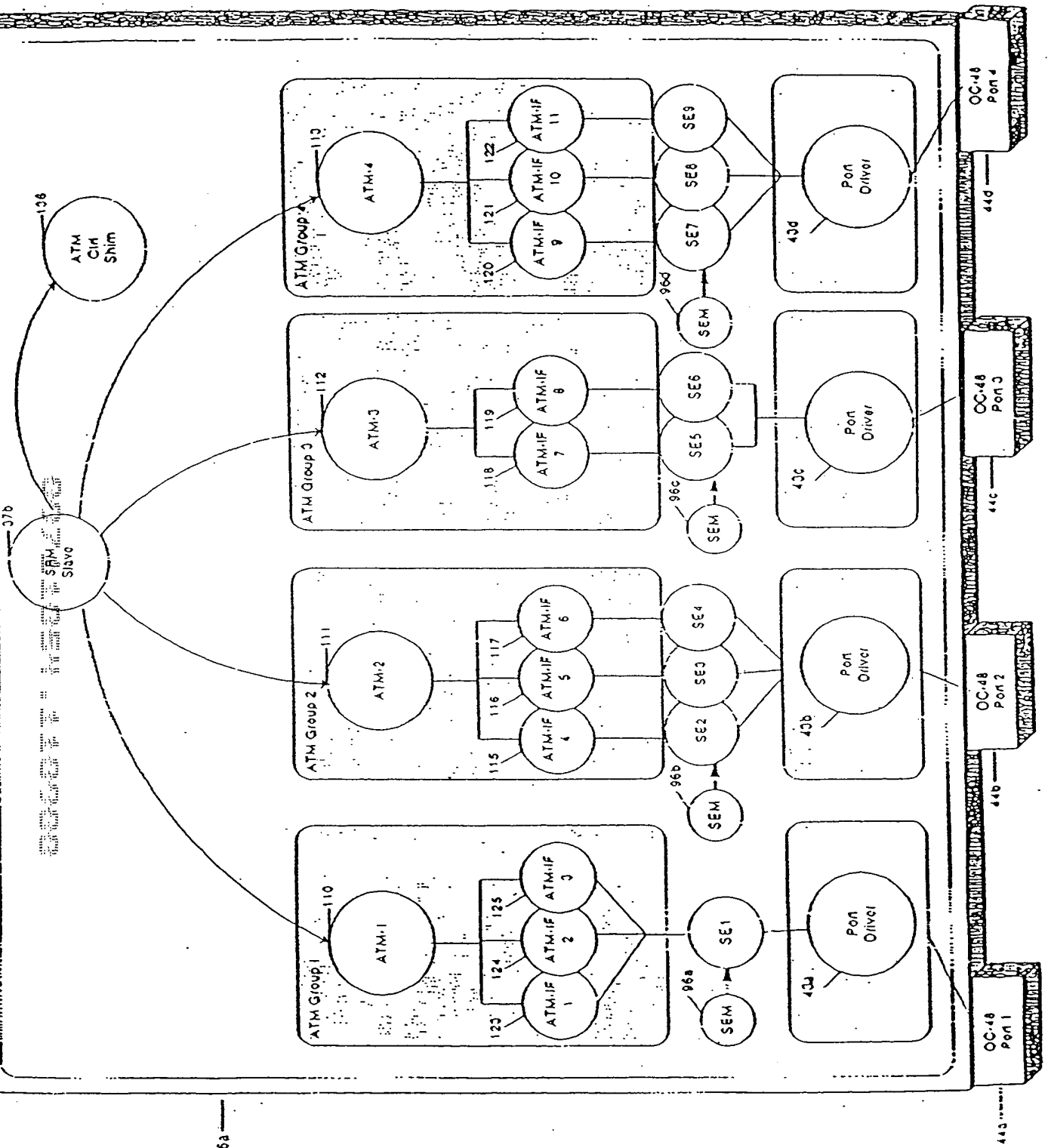


FIG. 16a

FIG. 16a

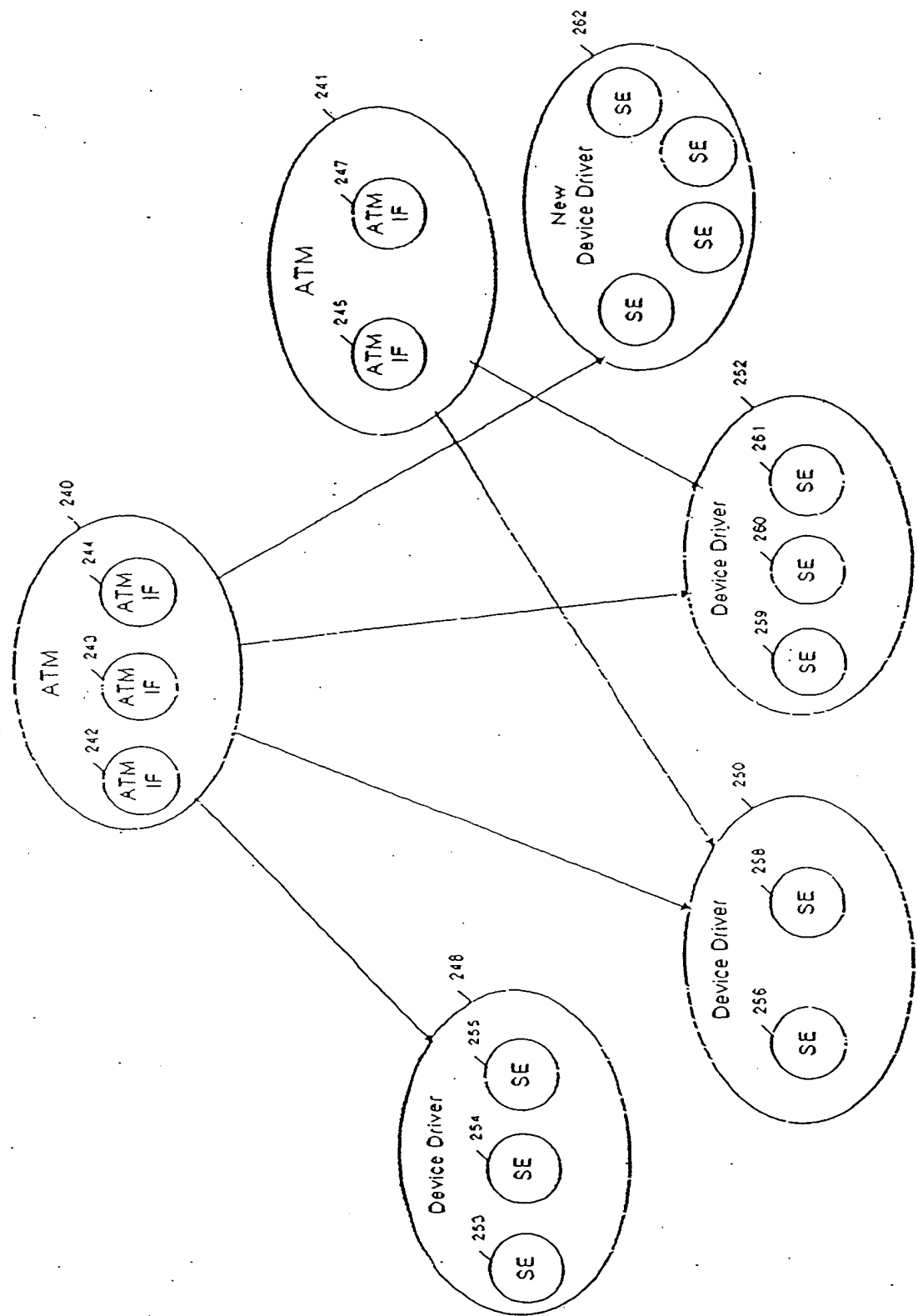


FIG. 16b

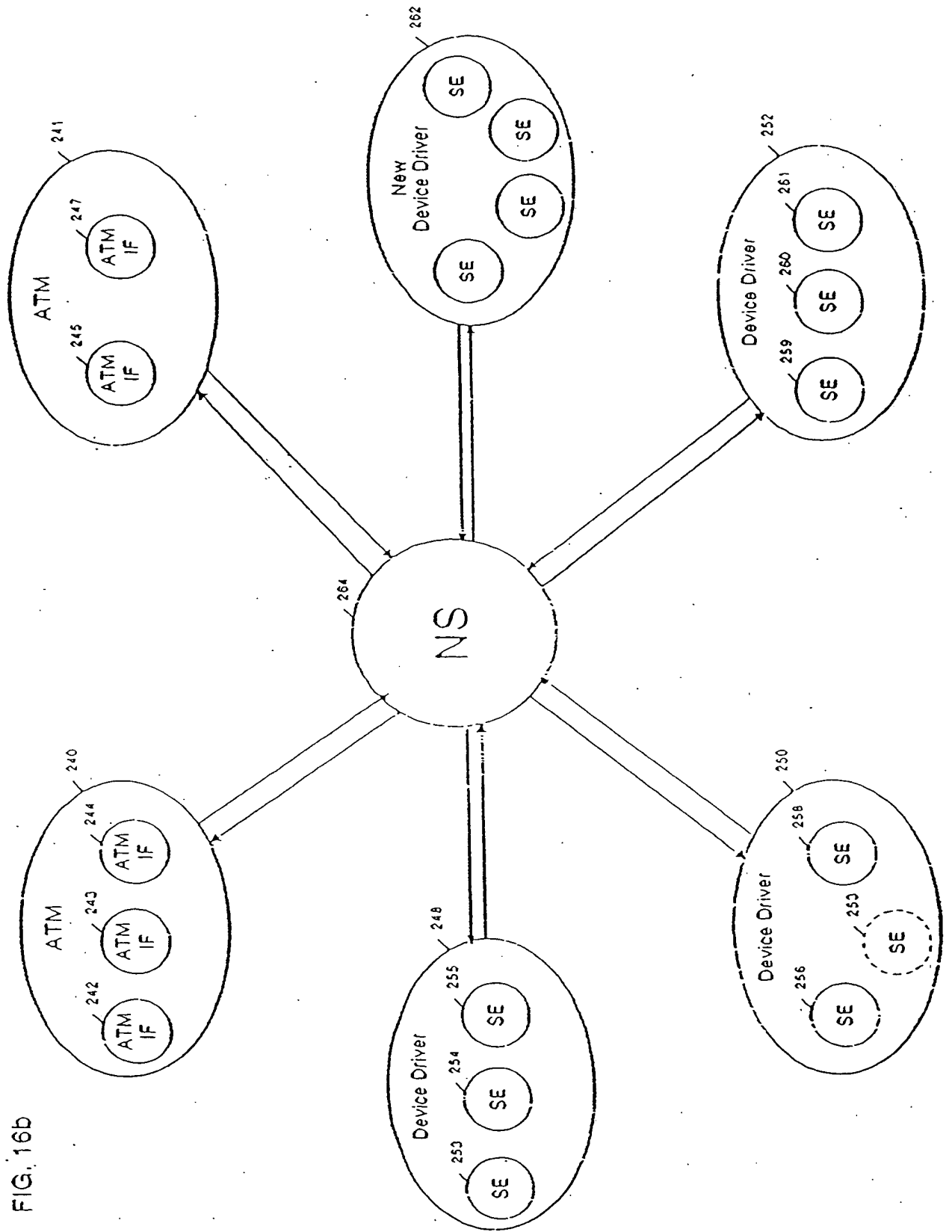


FIG. 16c

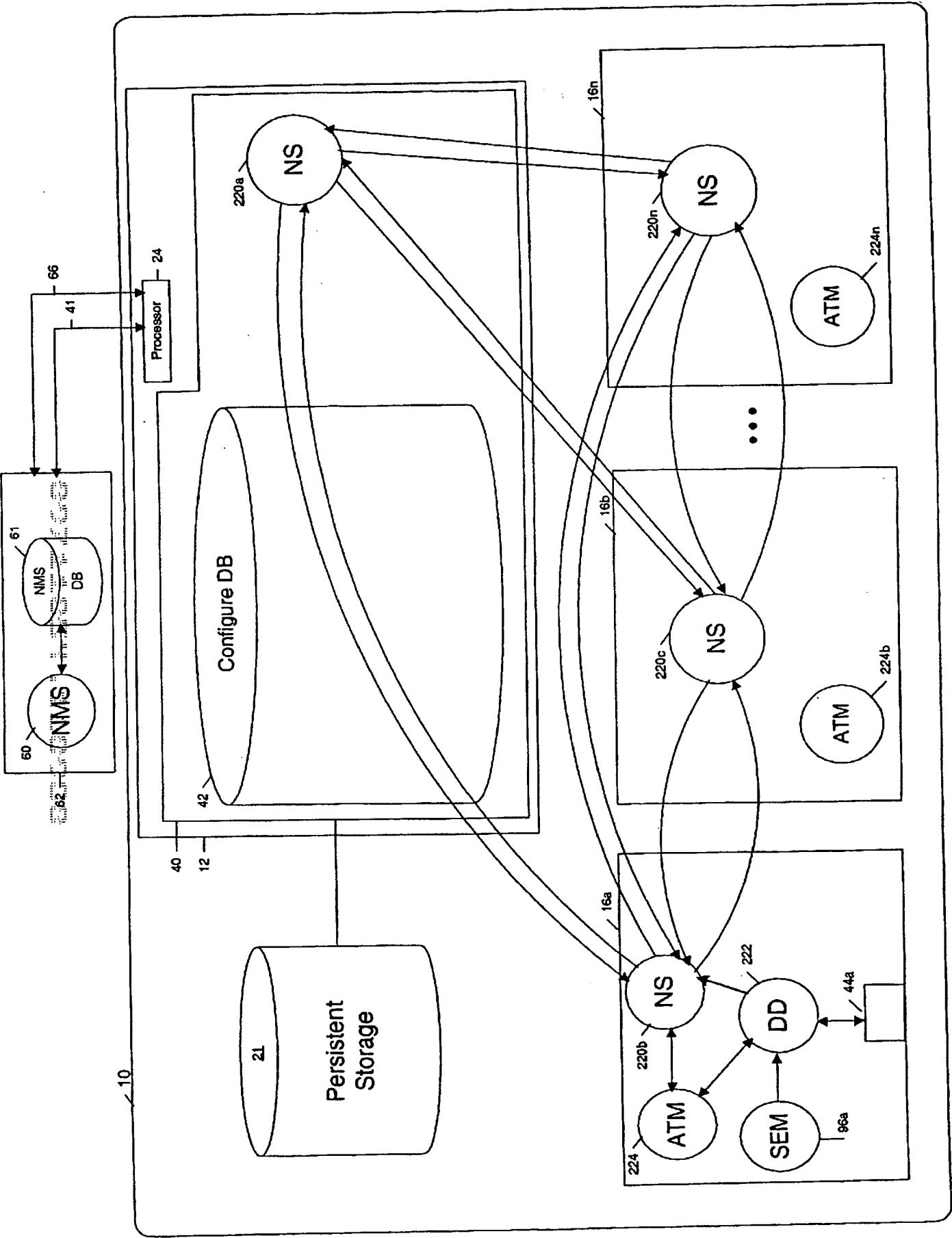


FIG. 16d

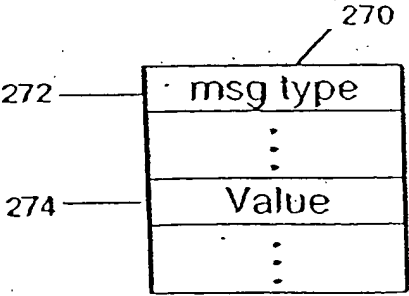


FIG. 17

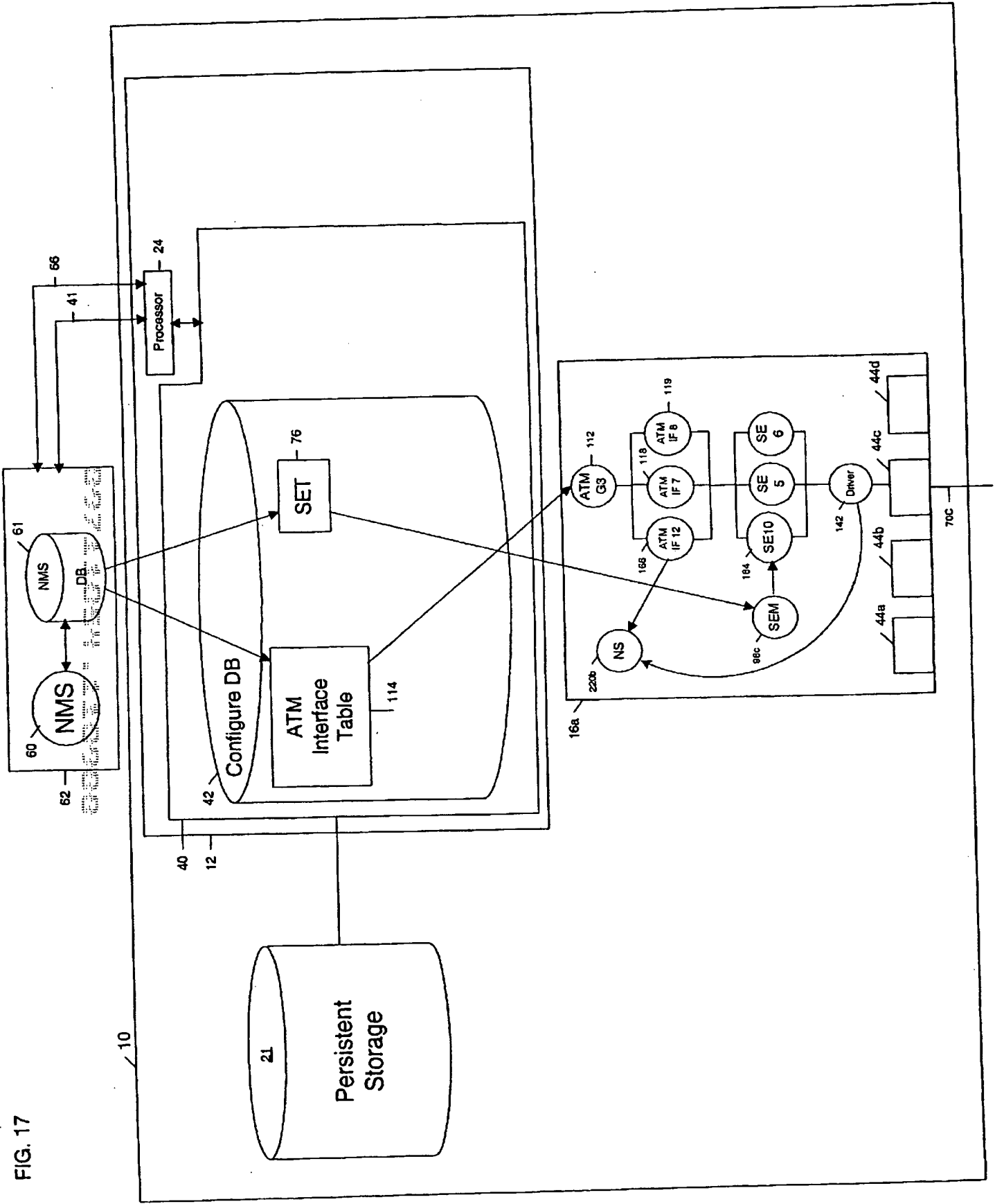




FIG. 18

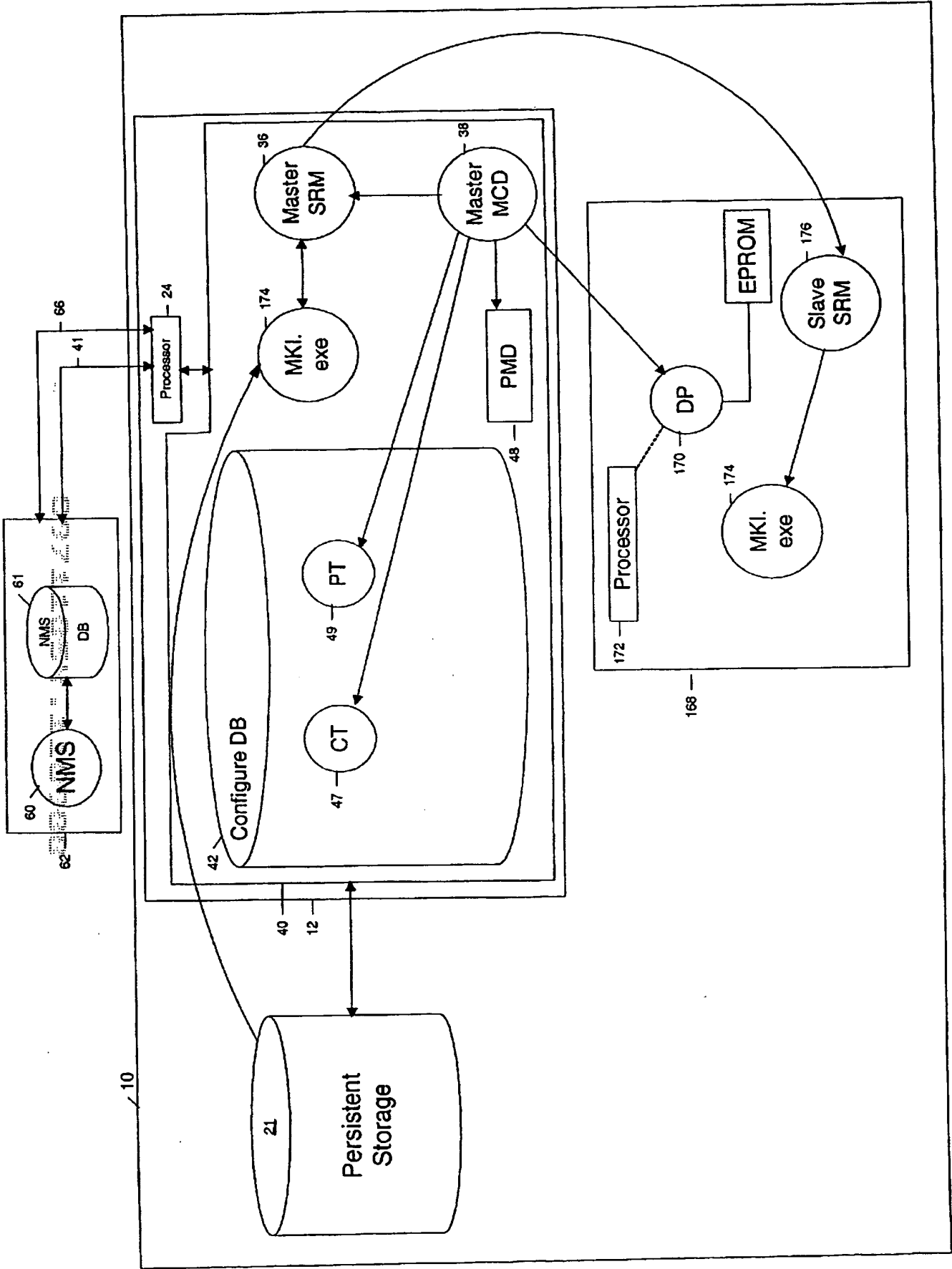


FIG. 19

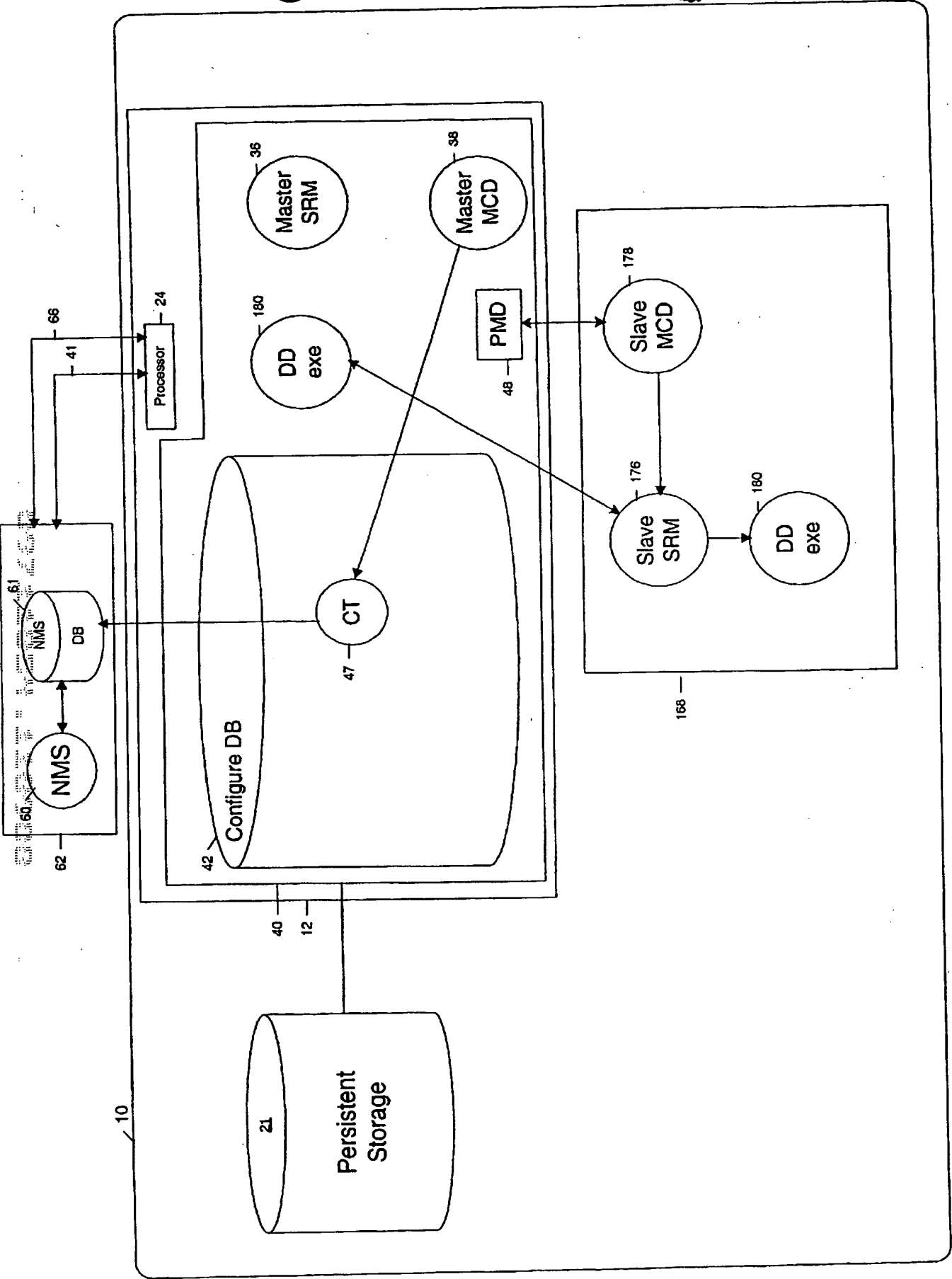


FIG. 20

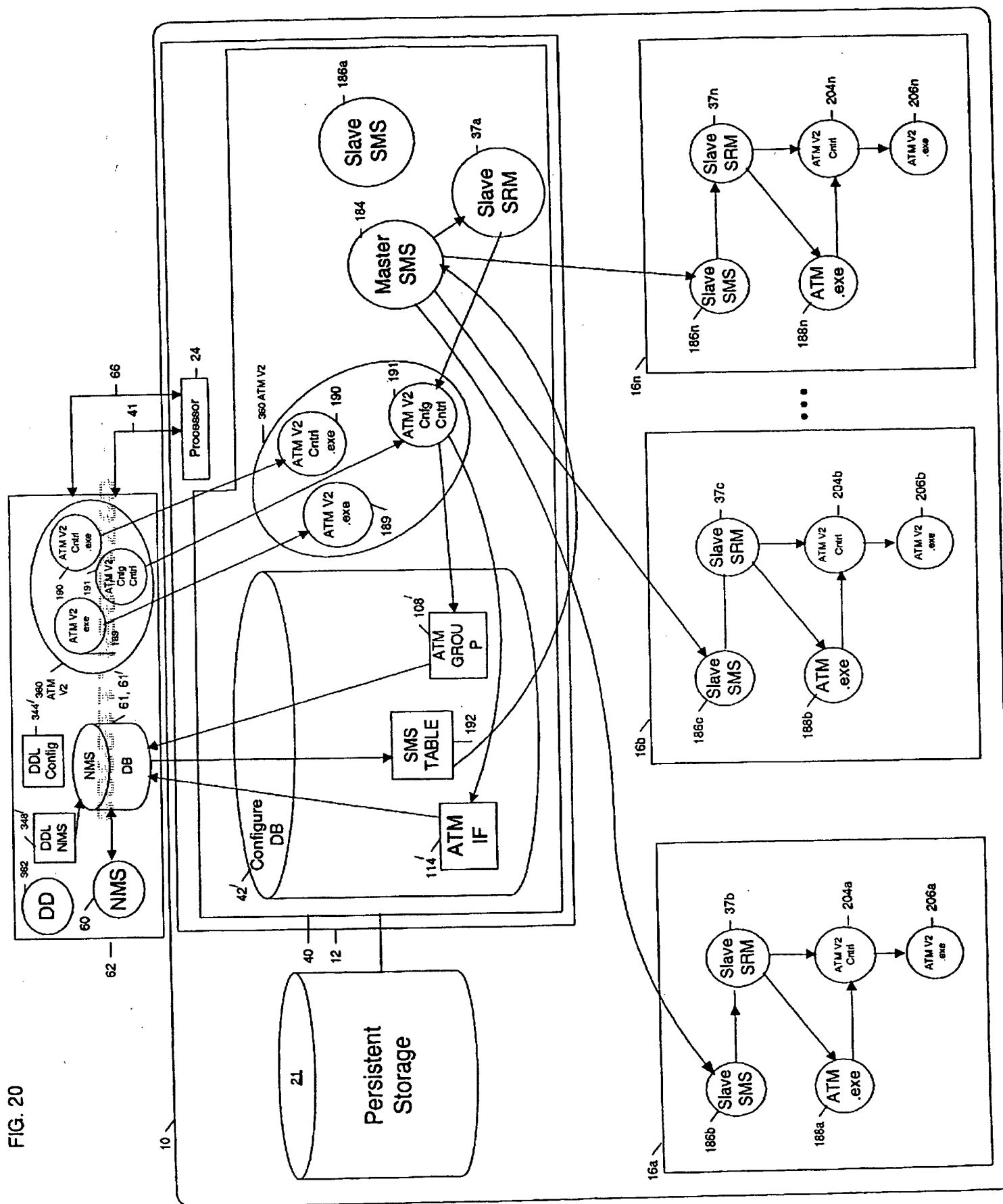


FIG. 21

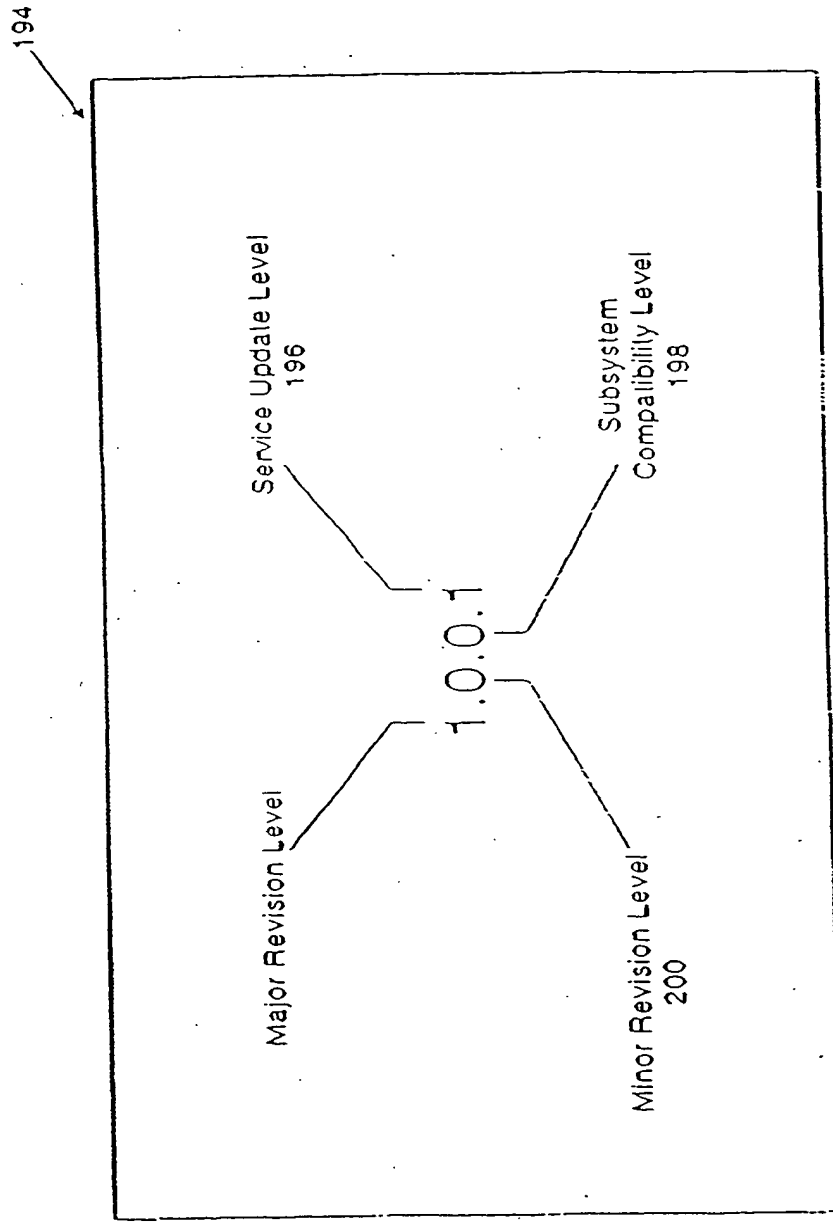


FIG. 22

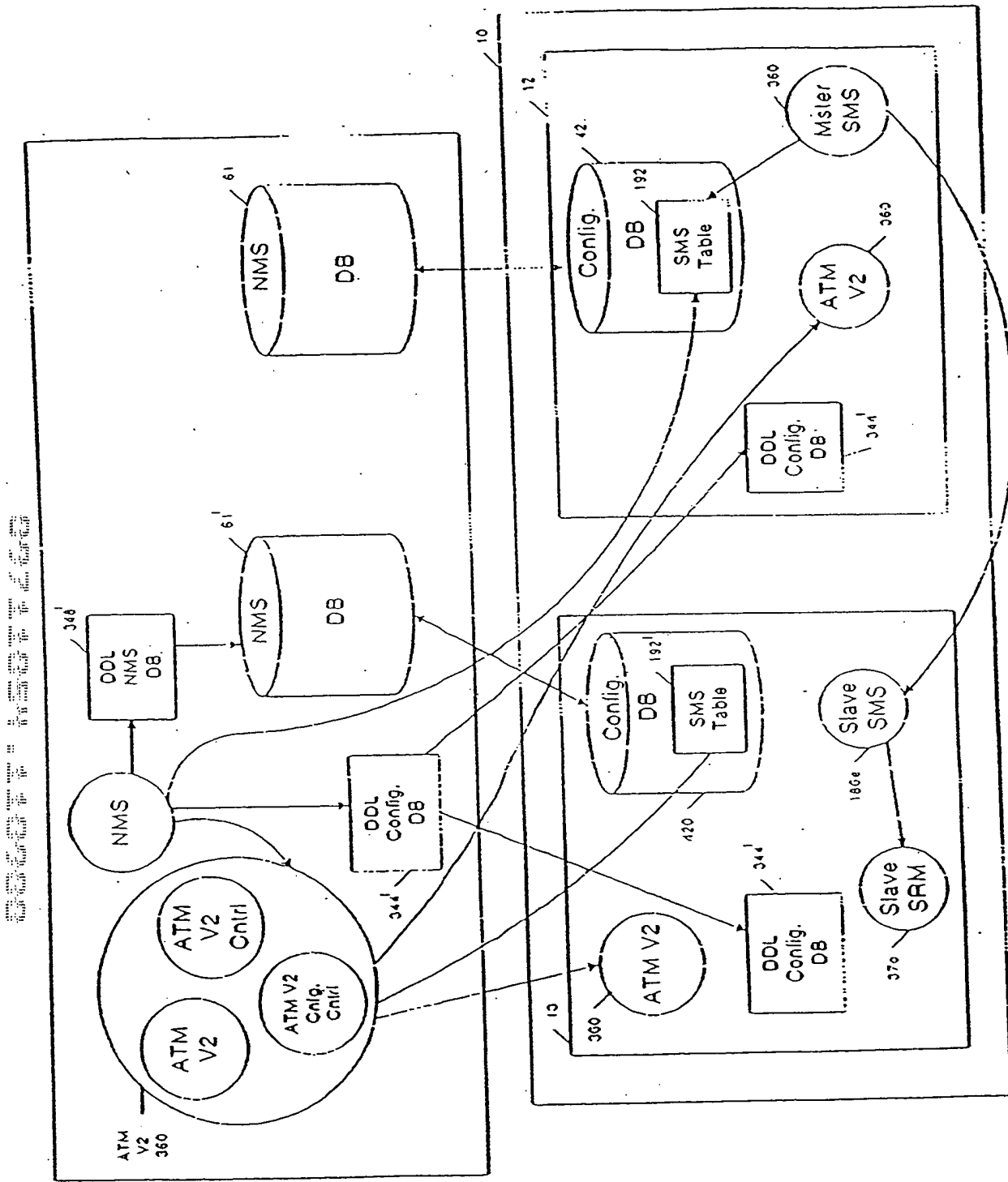


FIG. 23

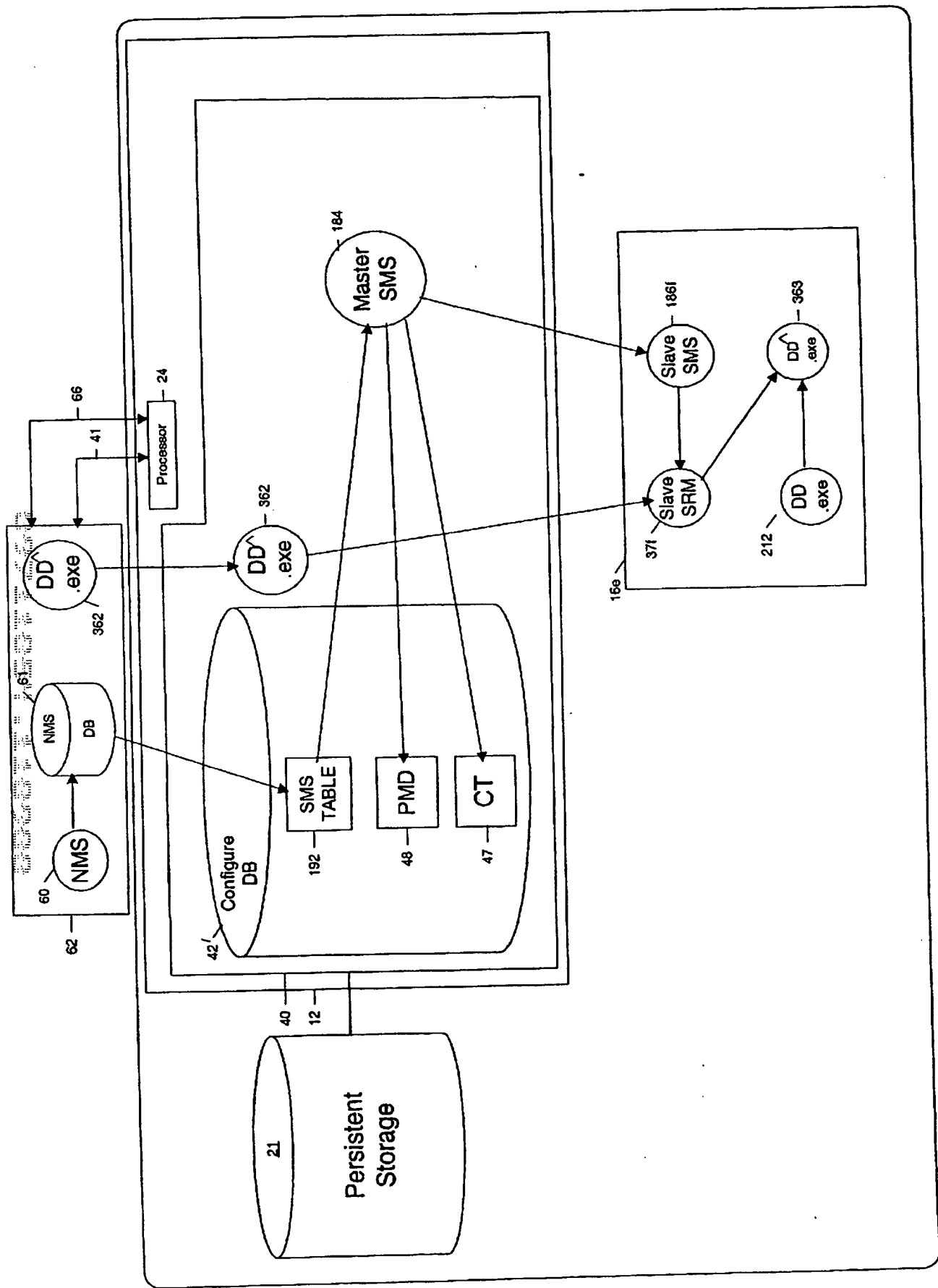


FIG. 24

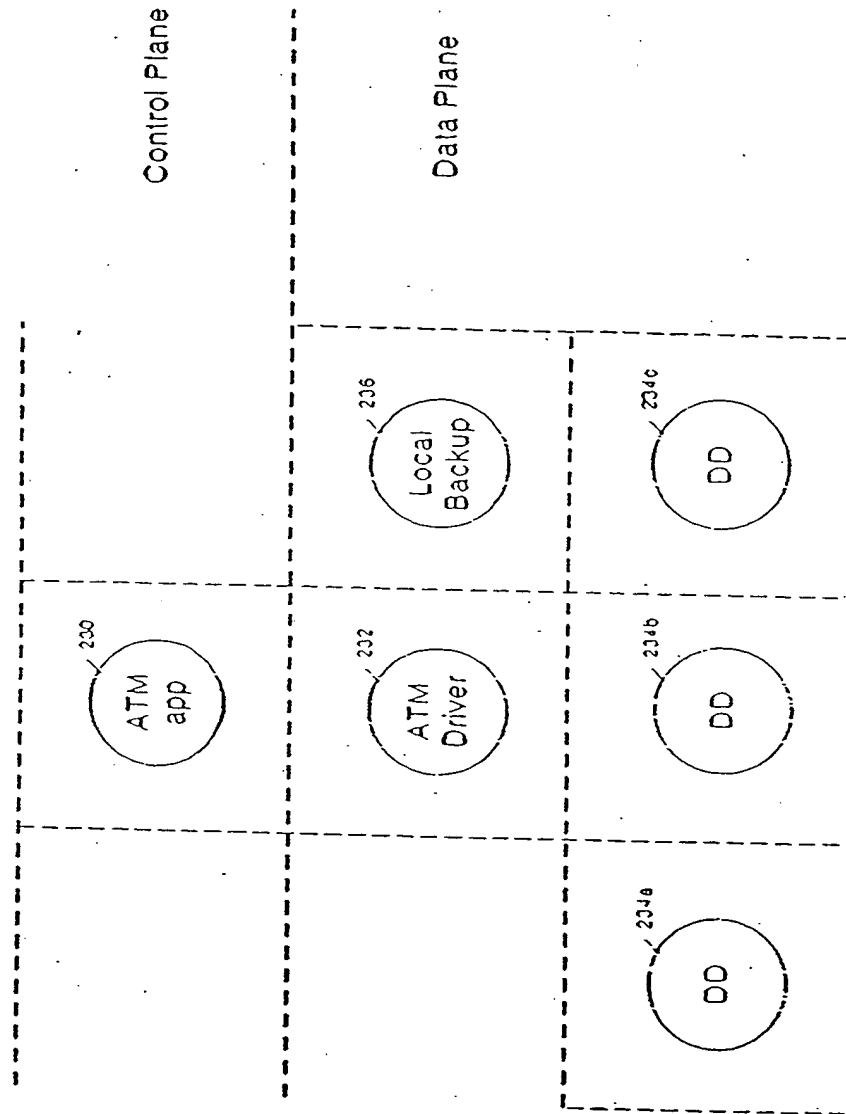


FIG. 25

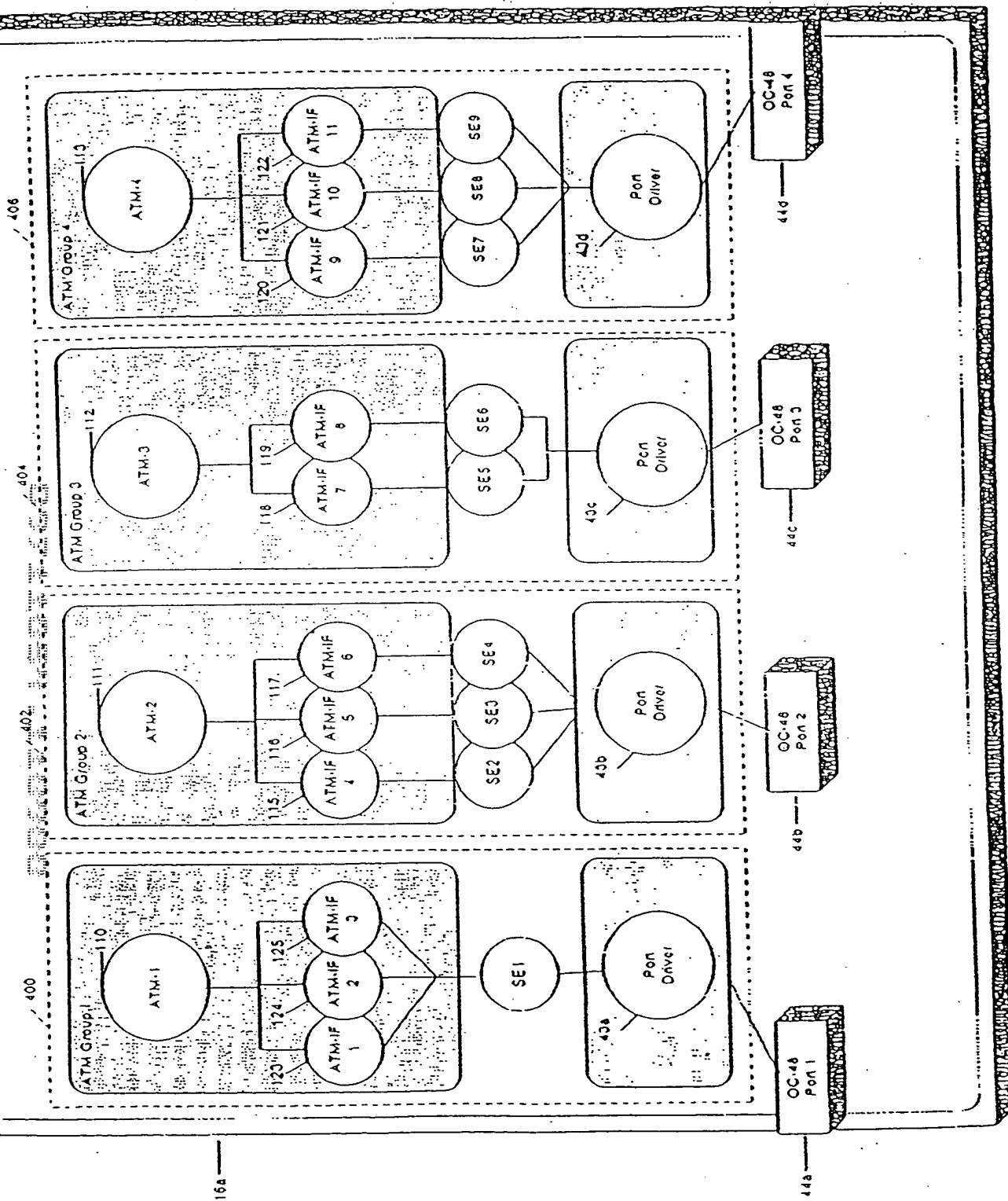




FIG. 26

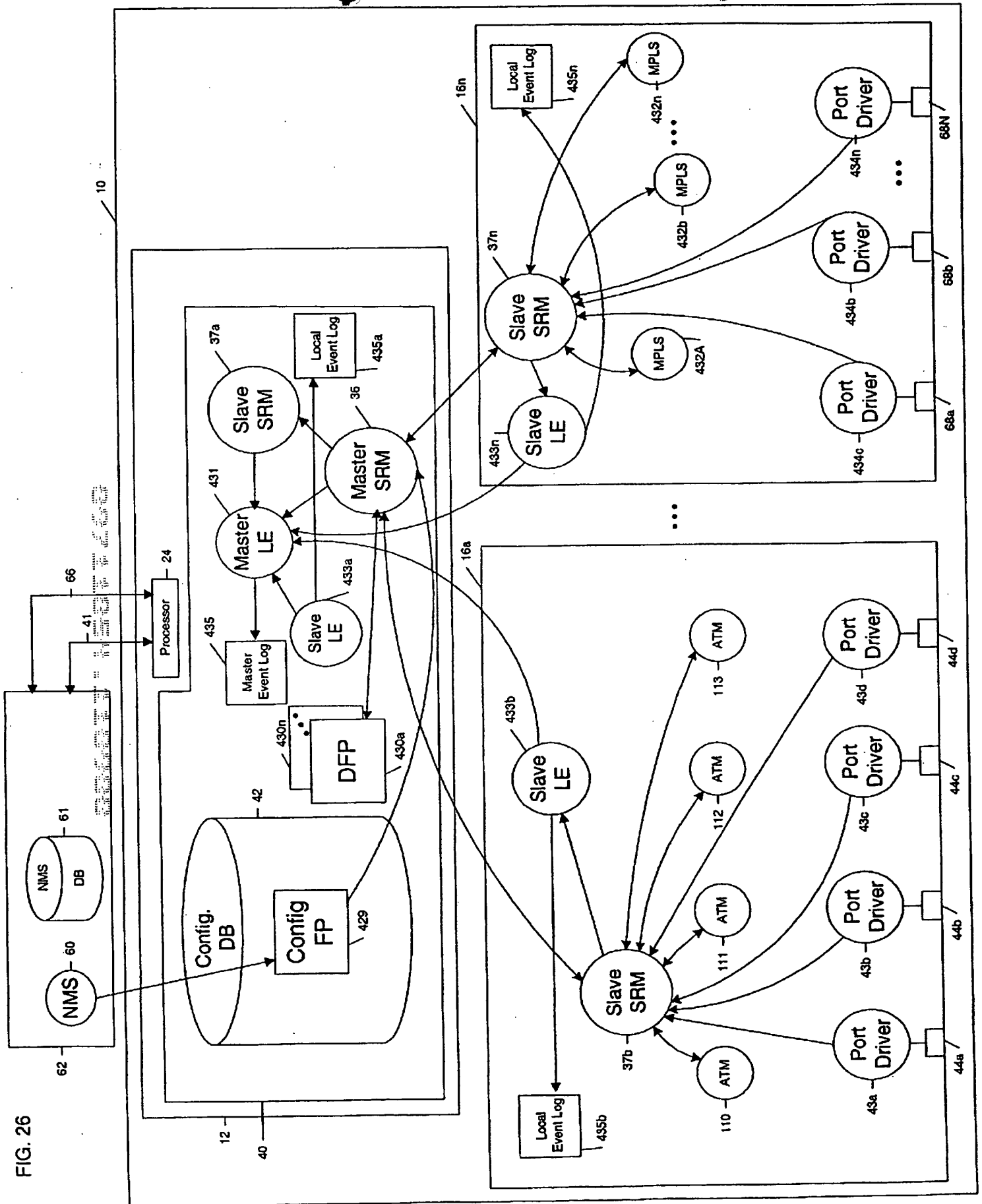


FIG. 27

FIG. 27 is a block diagram of a network architecture.

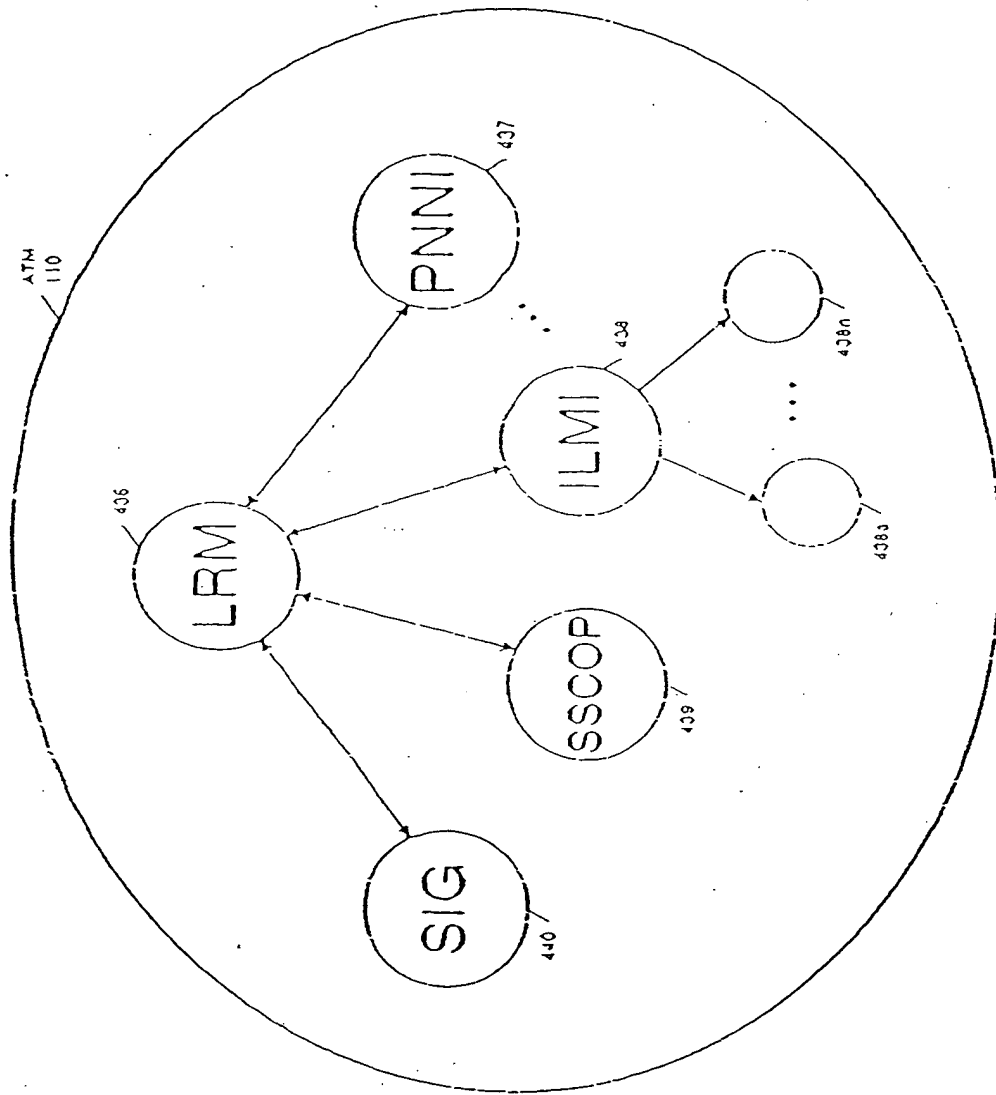


FIG. 28

FIG. 28 is a block diagram of a system for processing data.

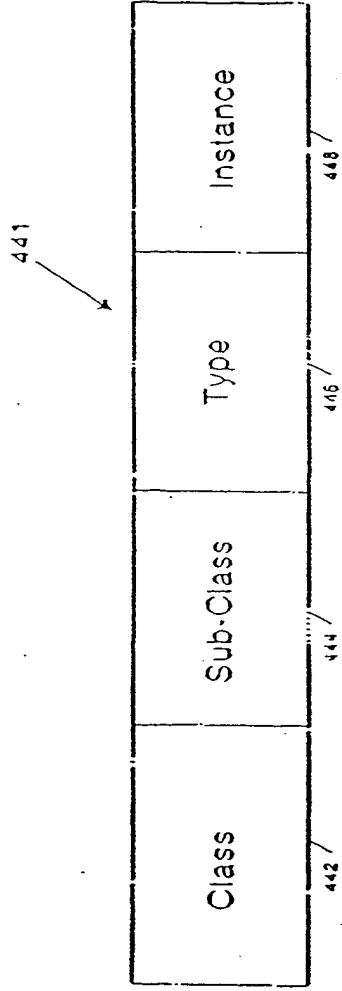
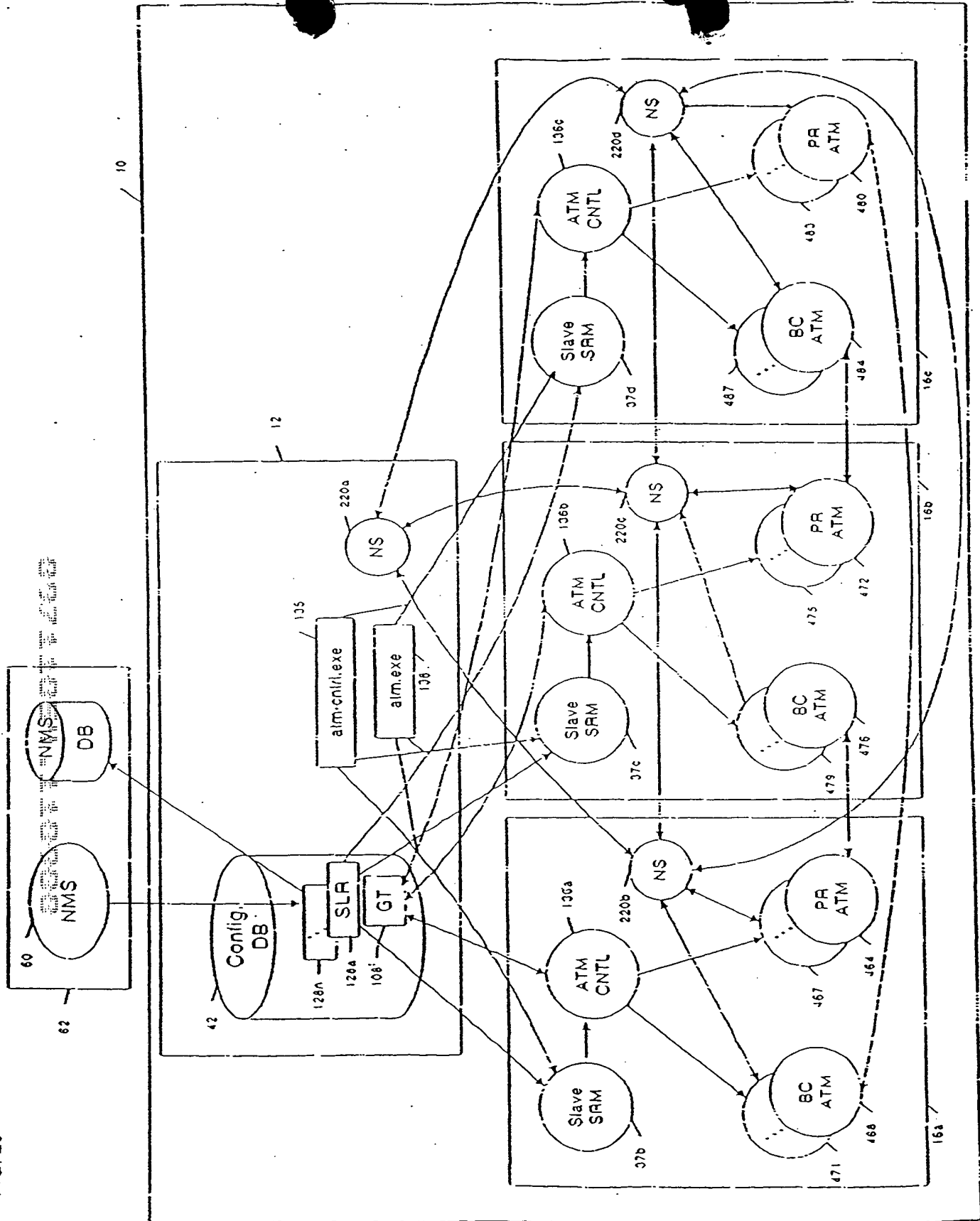


FIG. 29



Group Table 108'

447

449

	Group #	Primary Card LID	Backup Card LID	...
450	1	30	31	
451	2	30	31	
452	3	30	31	
453	4	30	31	
454	5	31	32	
455	6	31	32	
456	7	31	32	
457	8	31	32	
458	9	32	30	
459	10	32	30	
460	11	32	30	
461	12	32	30	
	⋮	⋮	⋮	⋮

Fig. 31a

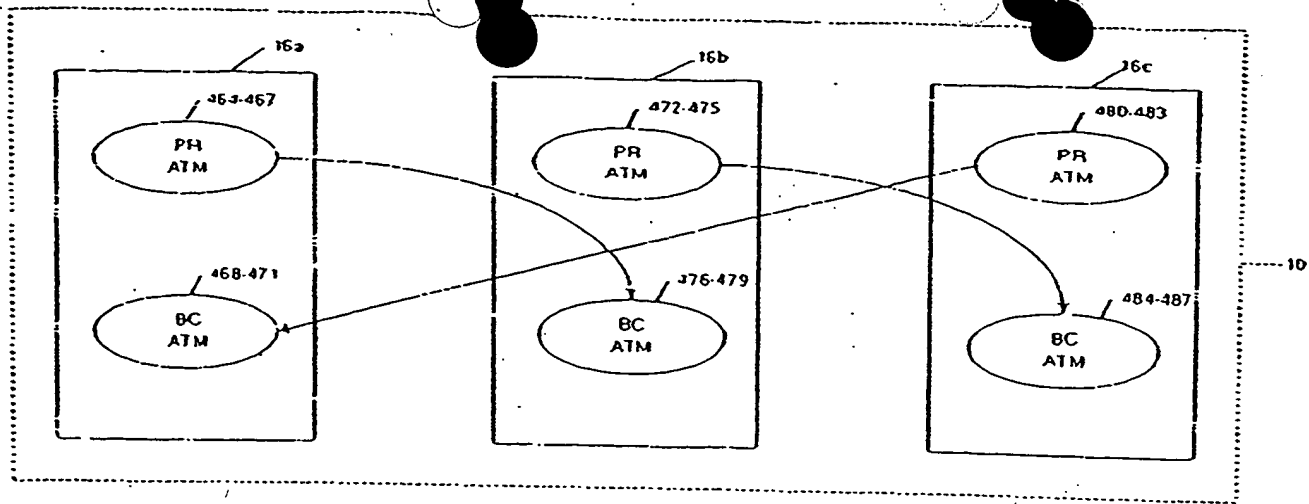


Fig. 31b

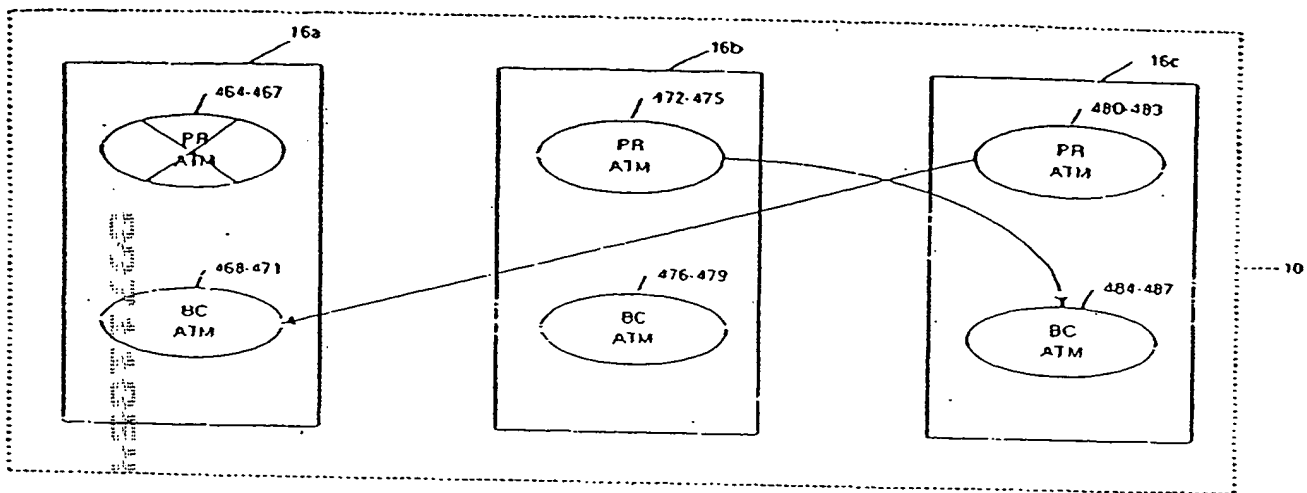


Fig. 31c

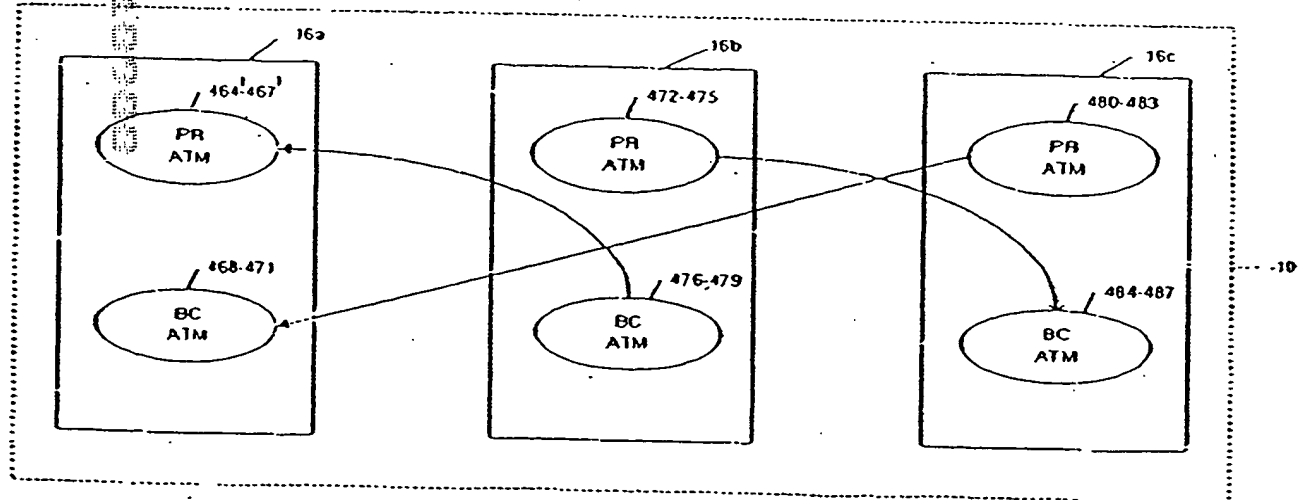
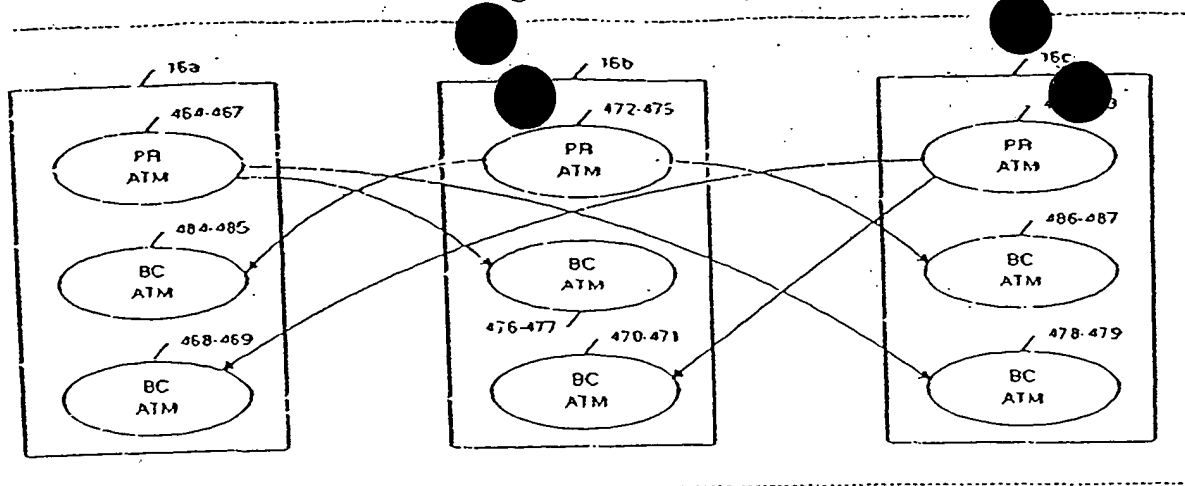


Fig. 32a



32A

Fig. 32b

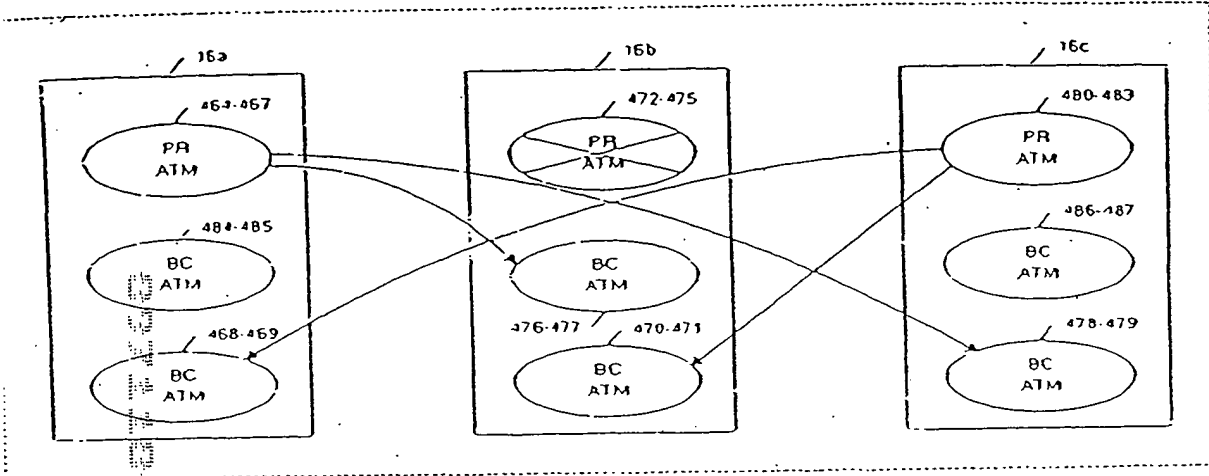


Fig. 32c

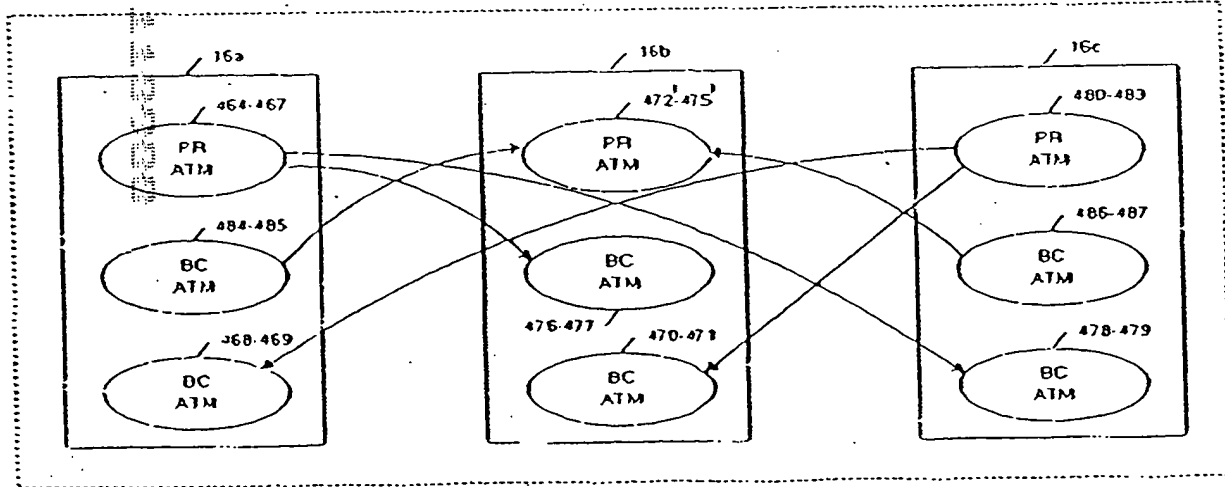


FIG. 33a

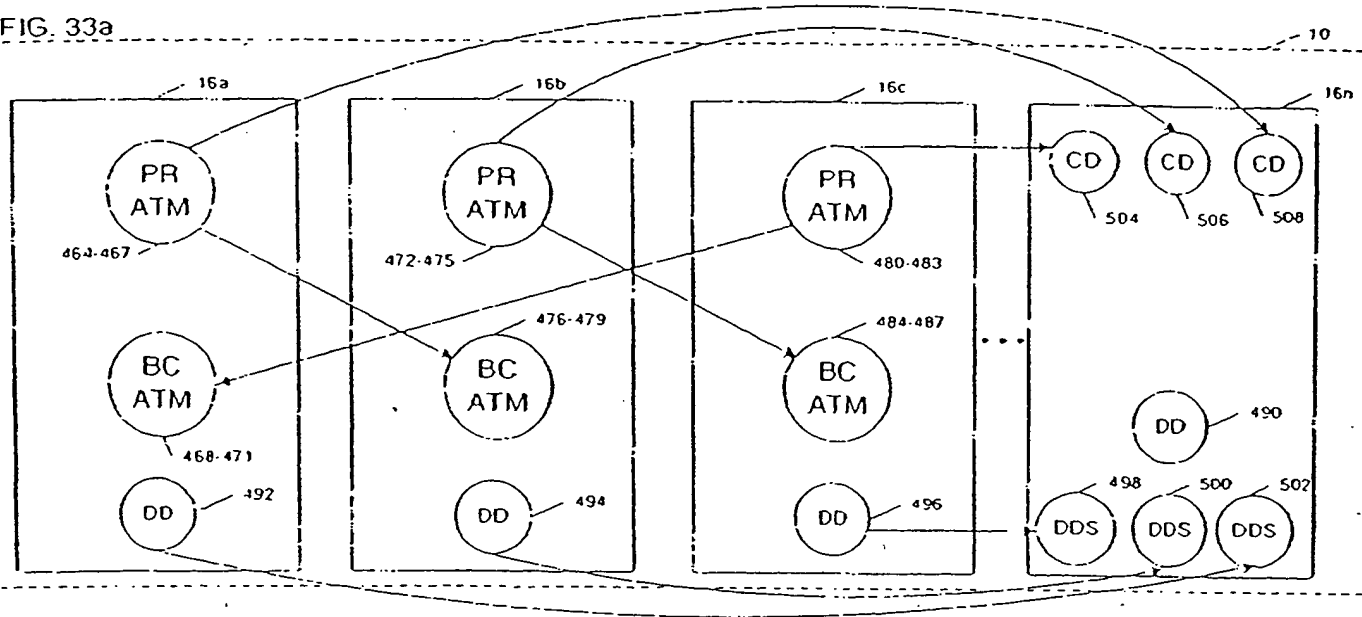


FIG. 33b

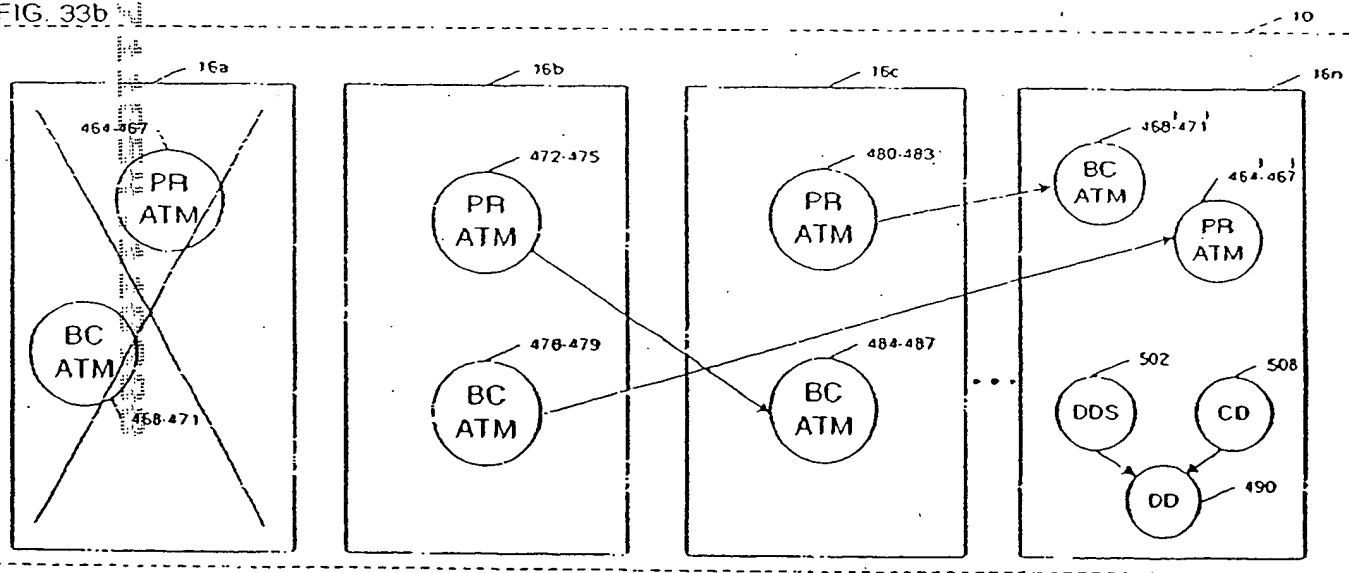




FIG. 33c

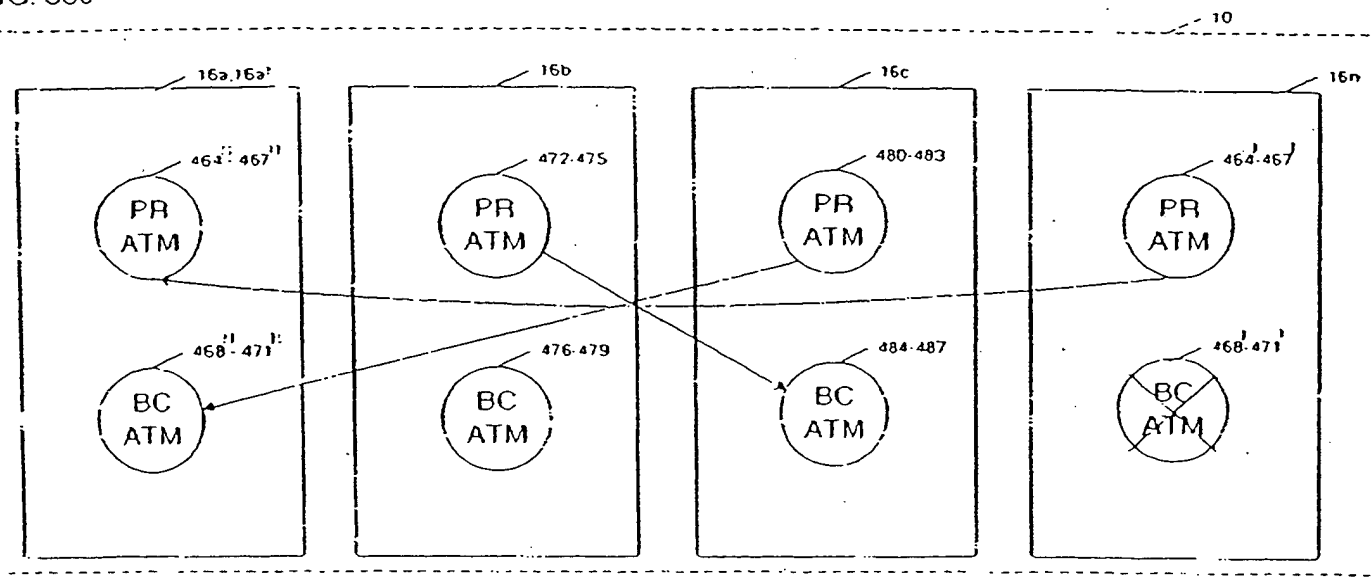


FIG. 33d

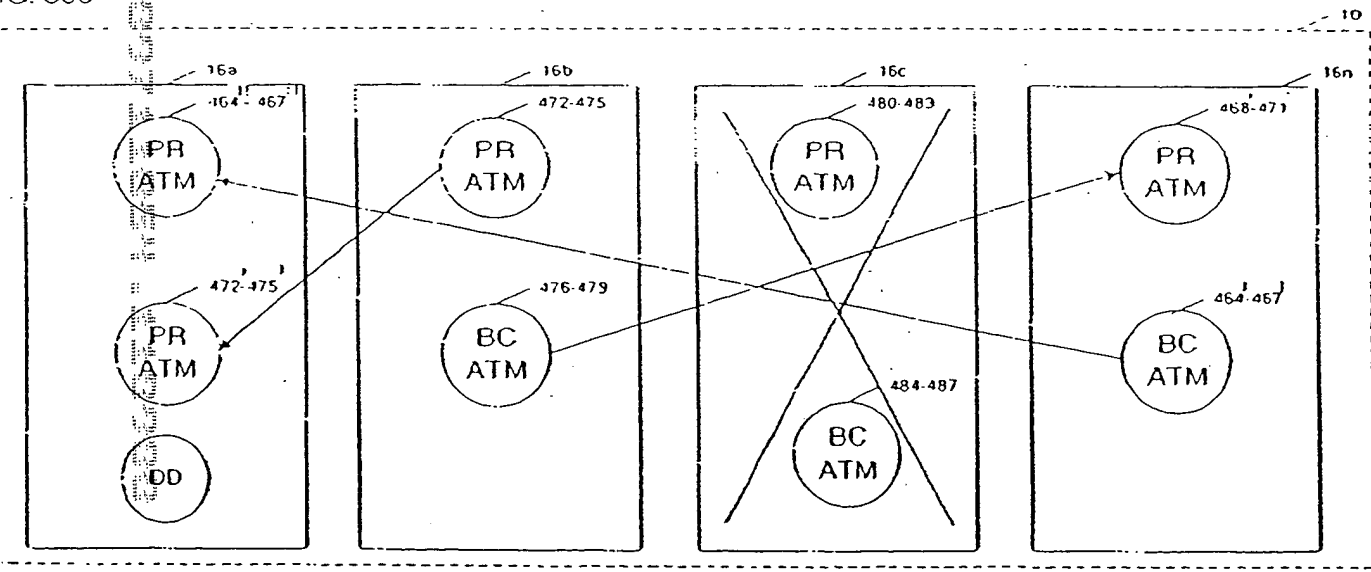


Fig. 34a

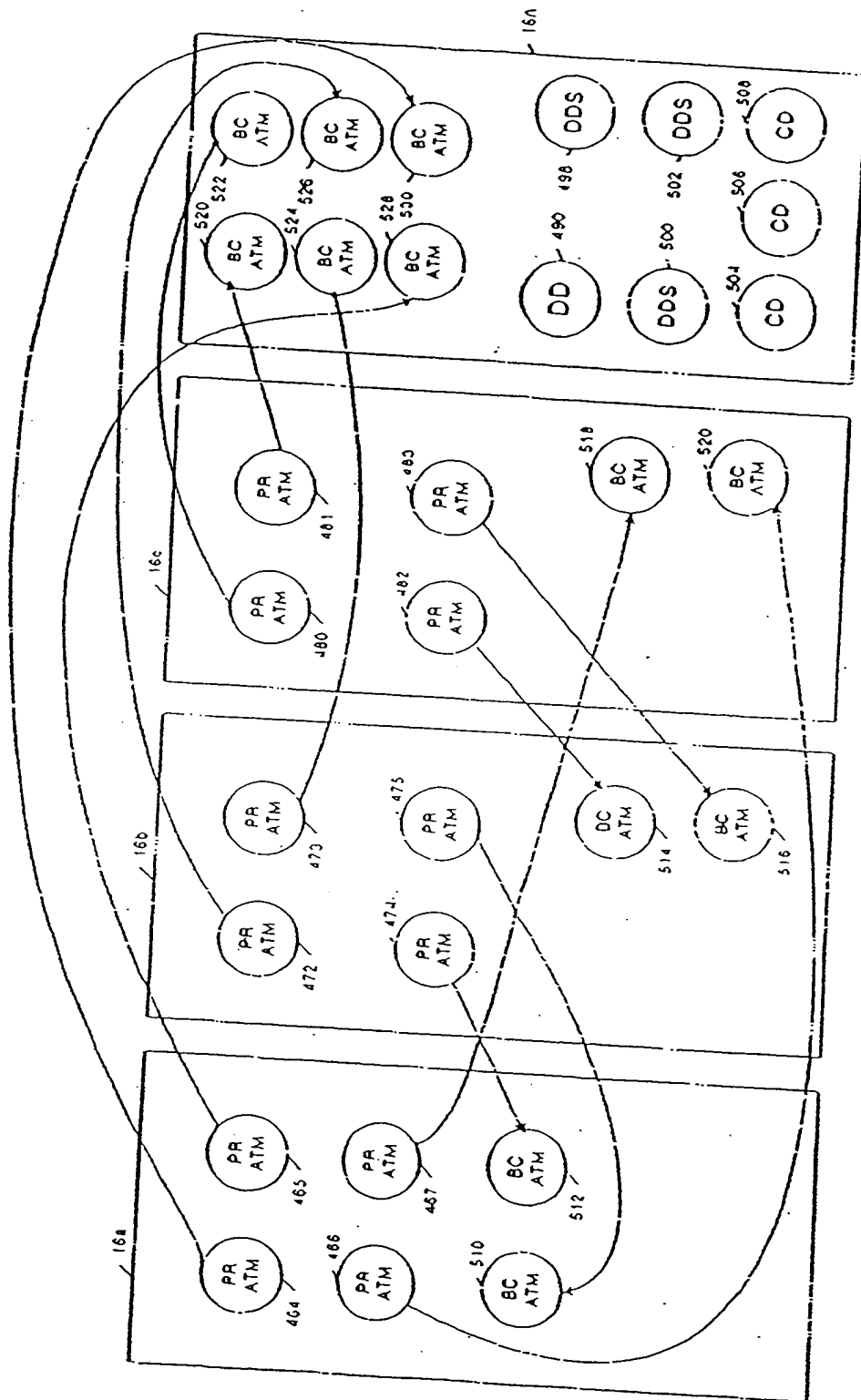


FIG. 35

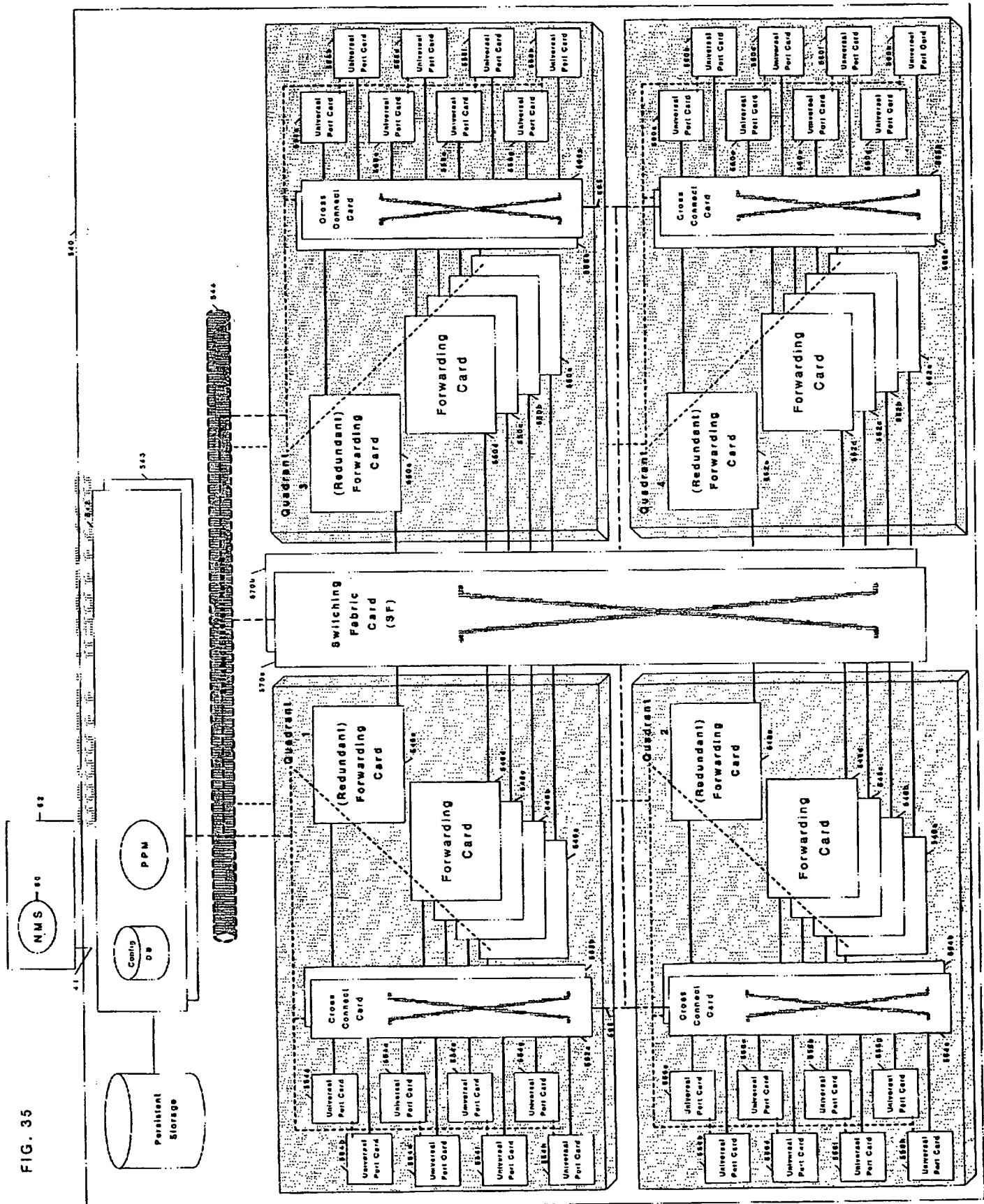
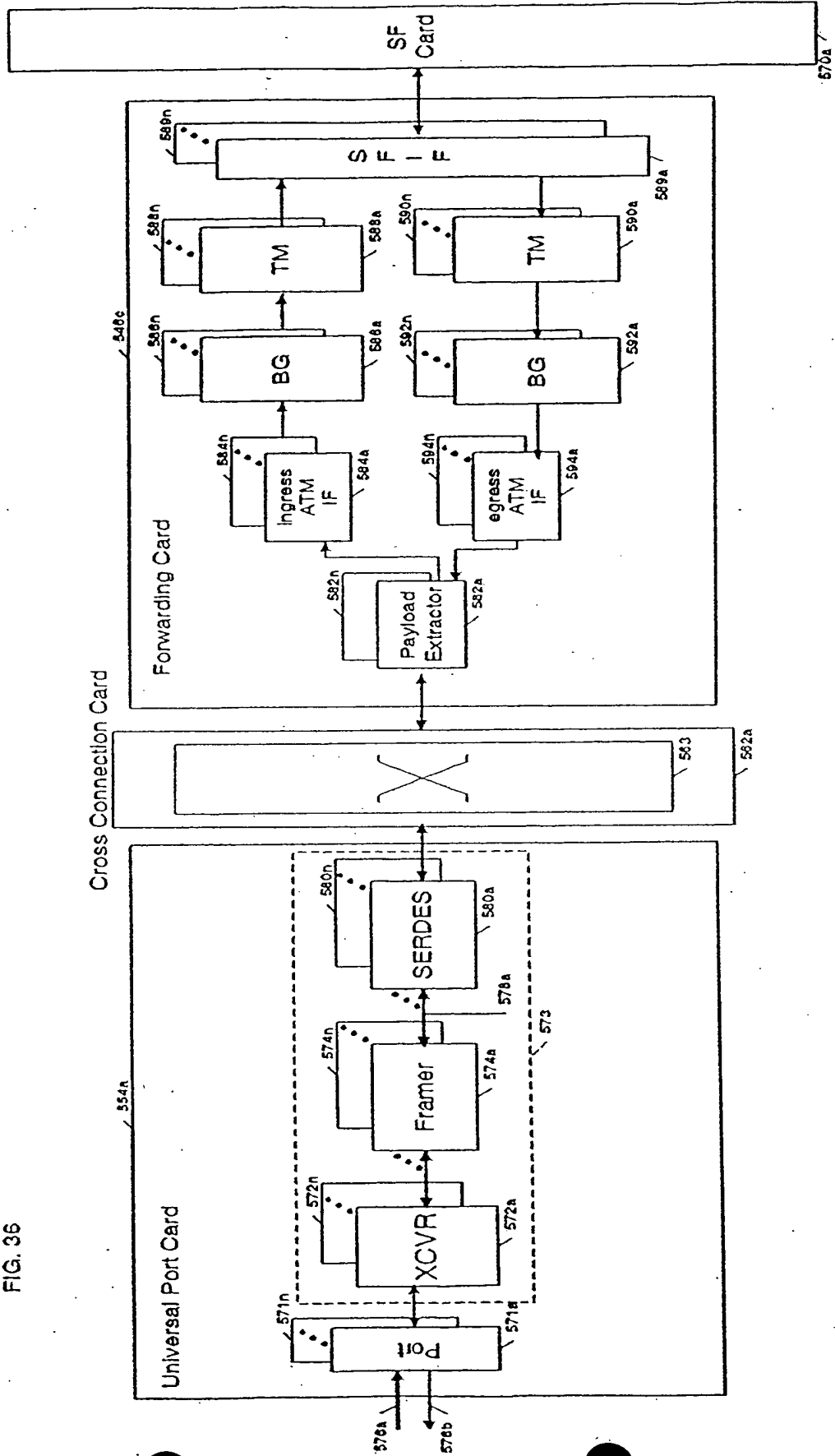


FIG. 36



By: Equipe Communications; 781 795 2031; Jul-12-00 3:56PM; Page 2

FIG. 37

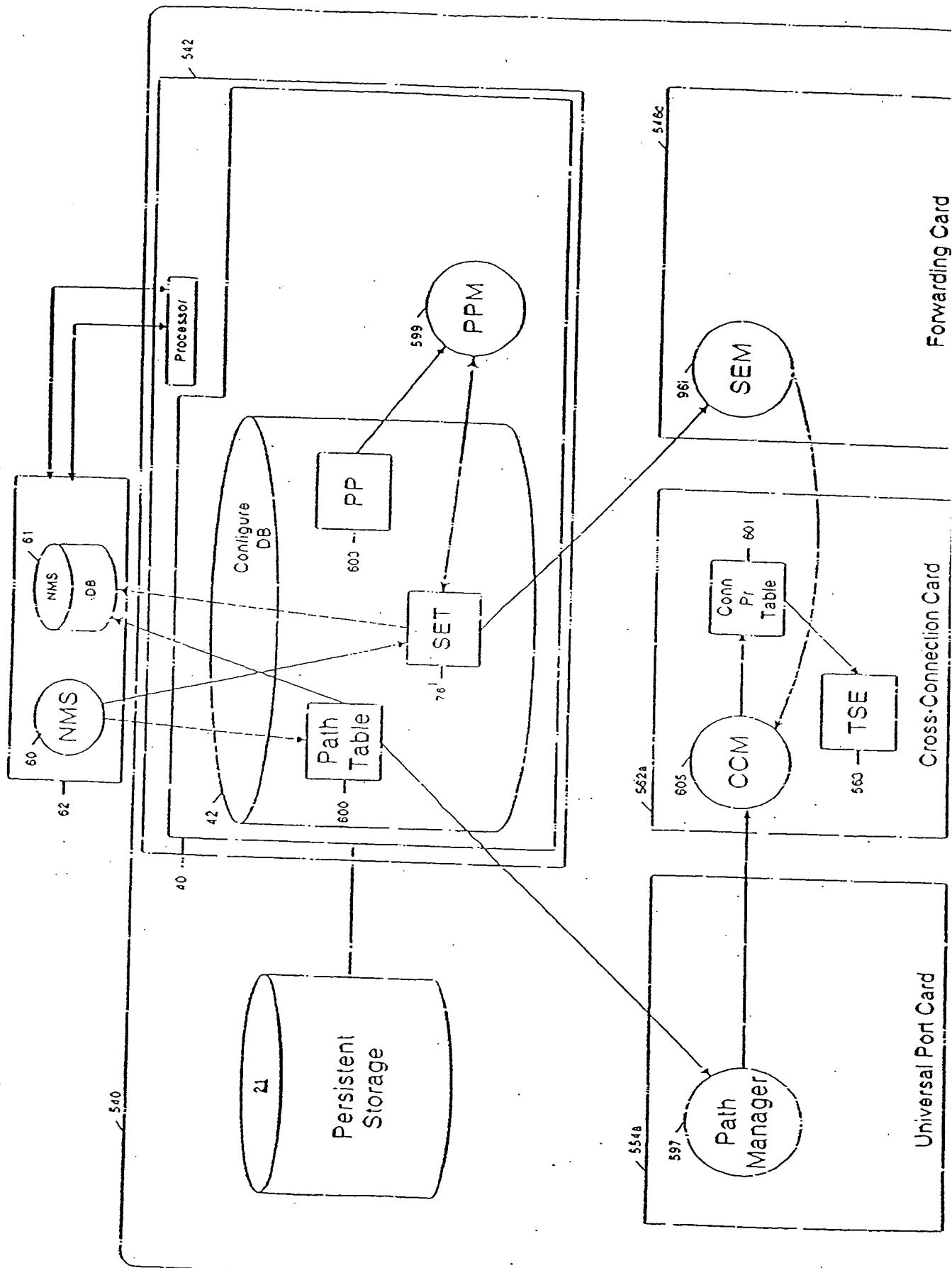


FIG. 38

Path Table 600

602

Path LID	UP Port LID	Time Slot	# of Time Slots	...
1666	1231	4	3	
...	...	...	...	...

FIG. 39

Service End Point Table 76'

SE #	Q #	FC LID	FC Slice	FC Time Slot	Path PID	...
878	1				1666	
:	:	:	:	:	:	:
:	:	:	:	:	:	:

540 →

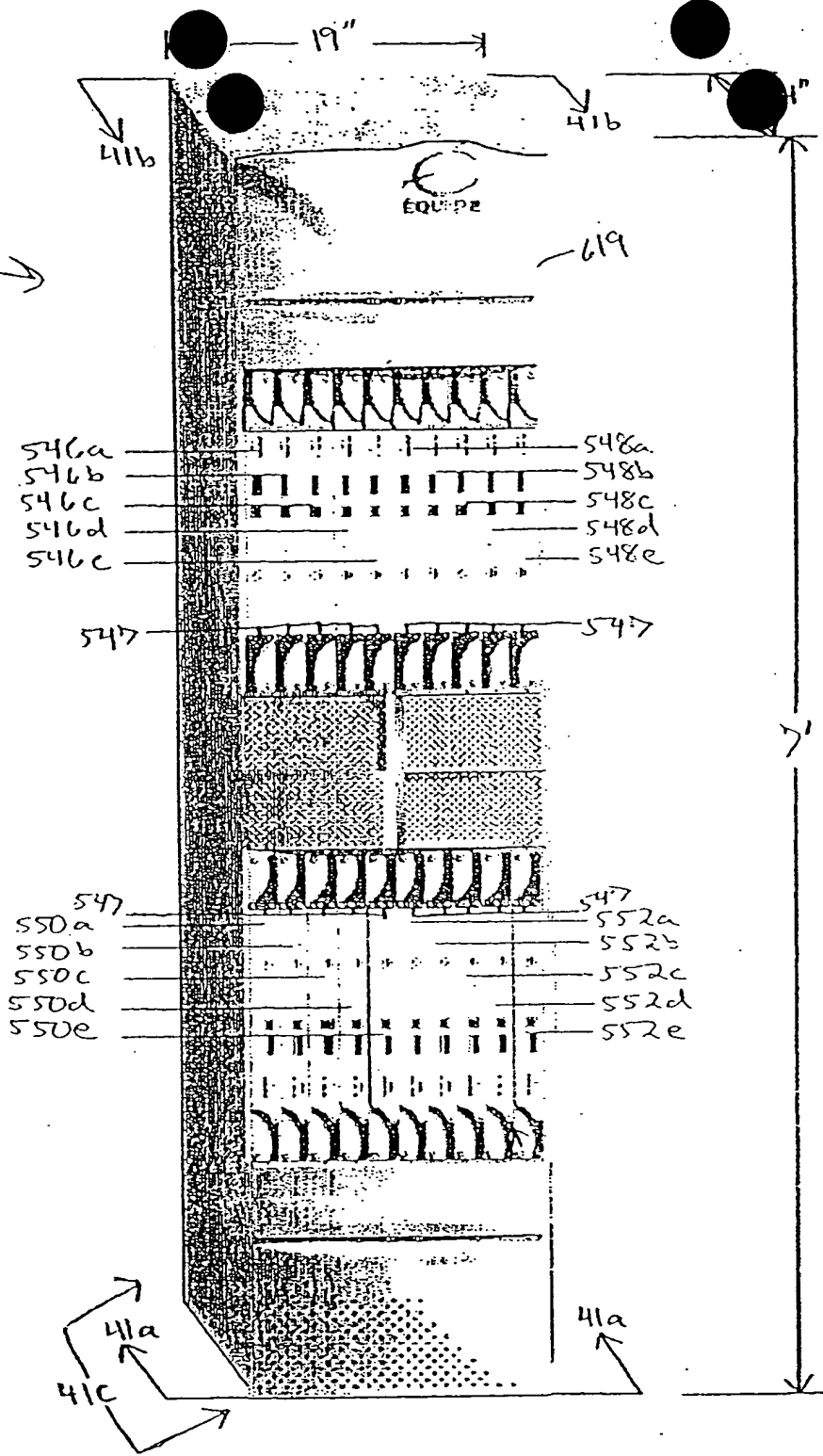


Fig. 40





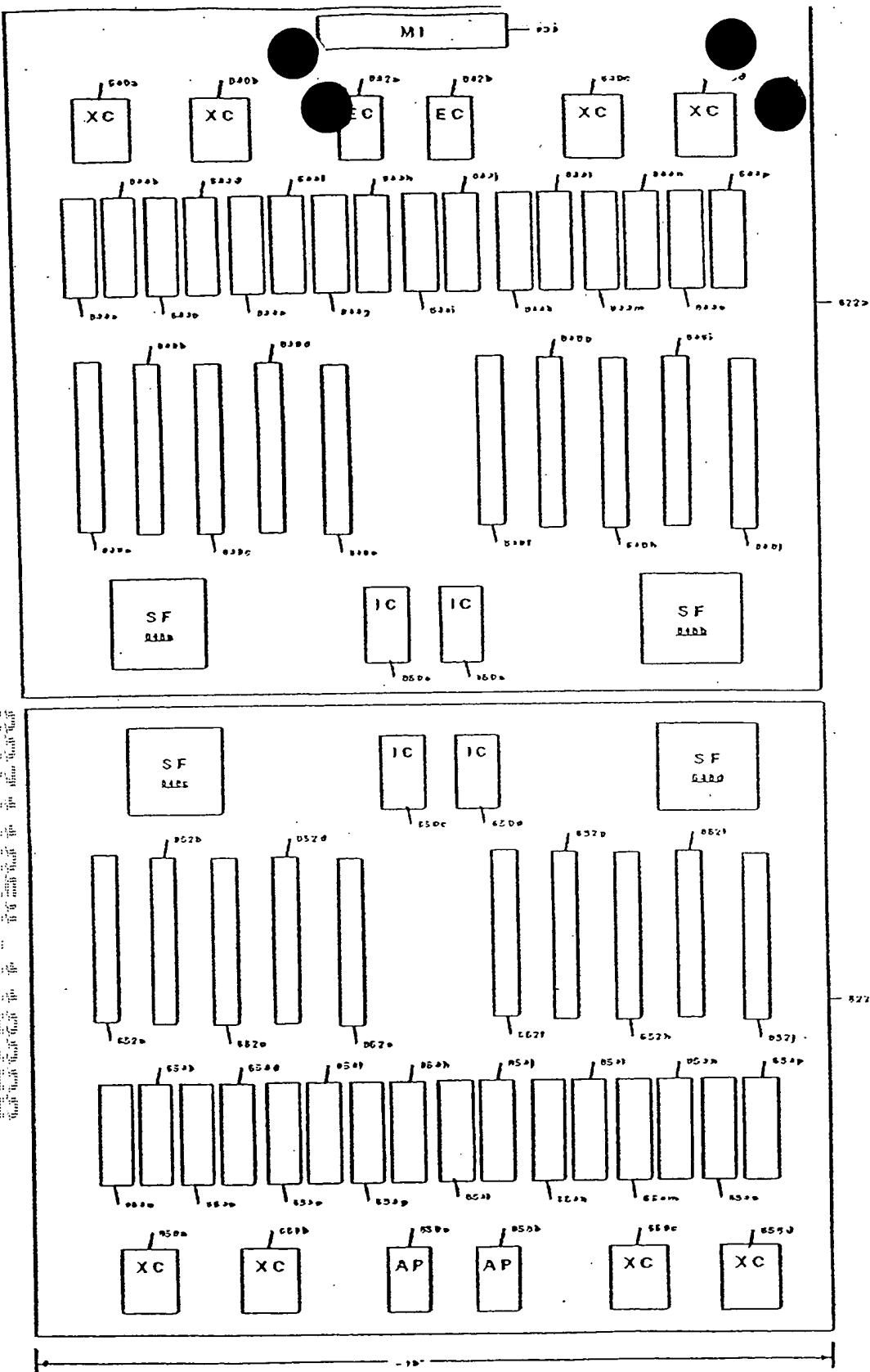
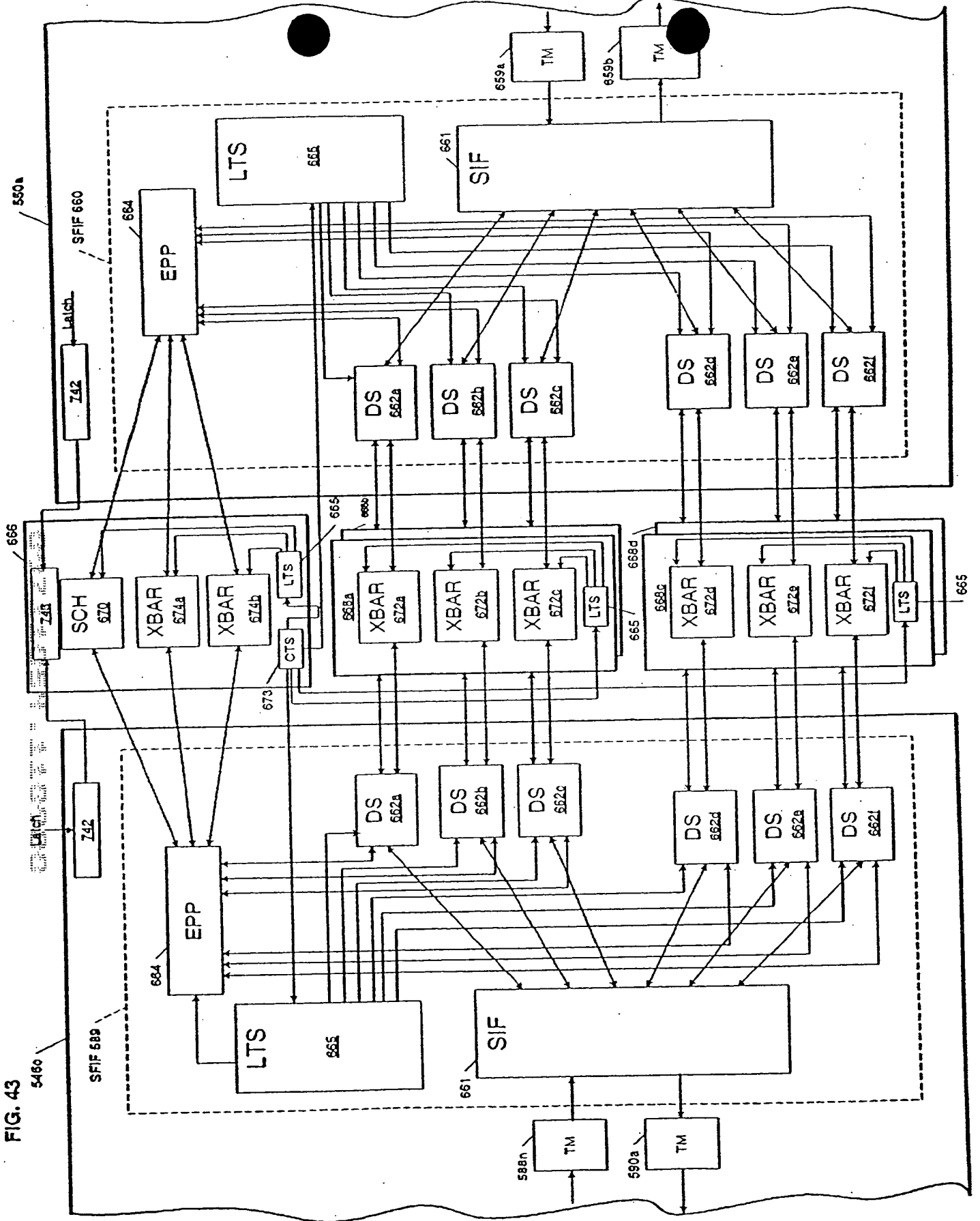


FIG. 43



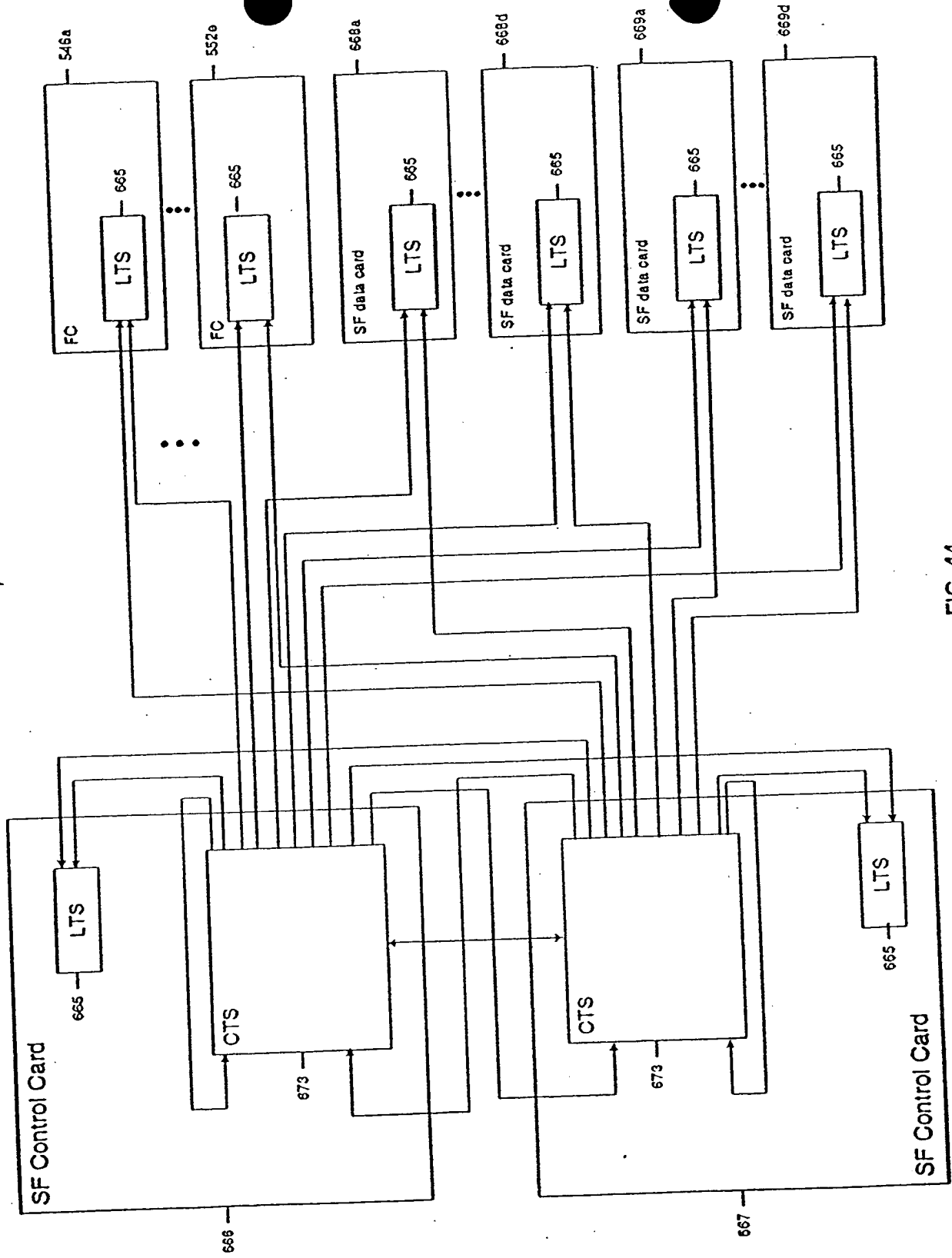
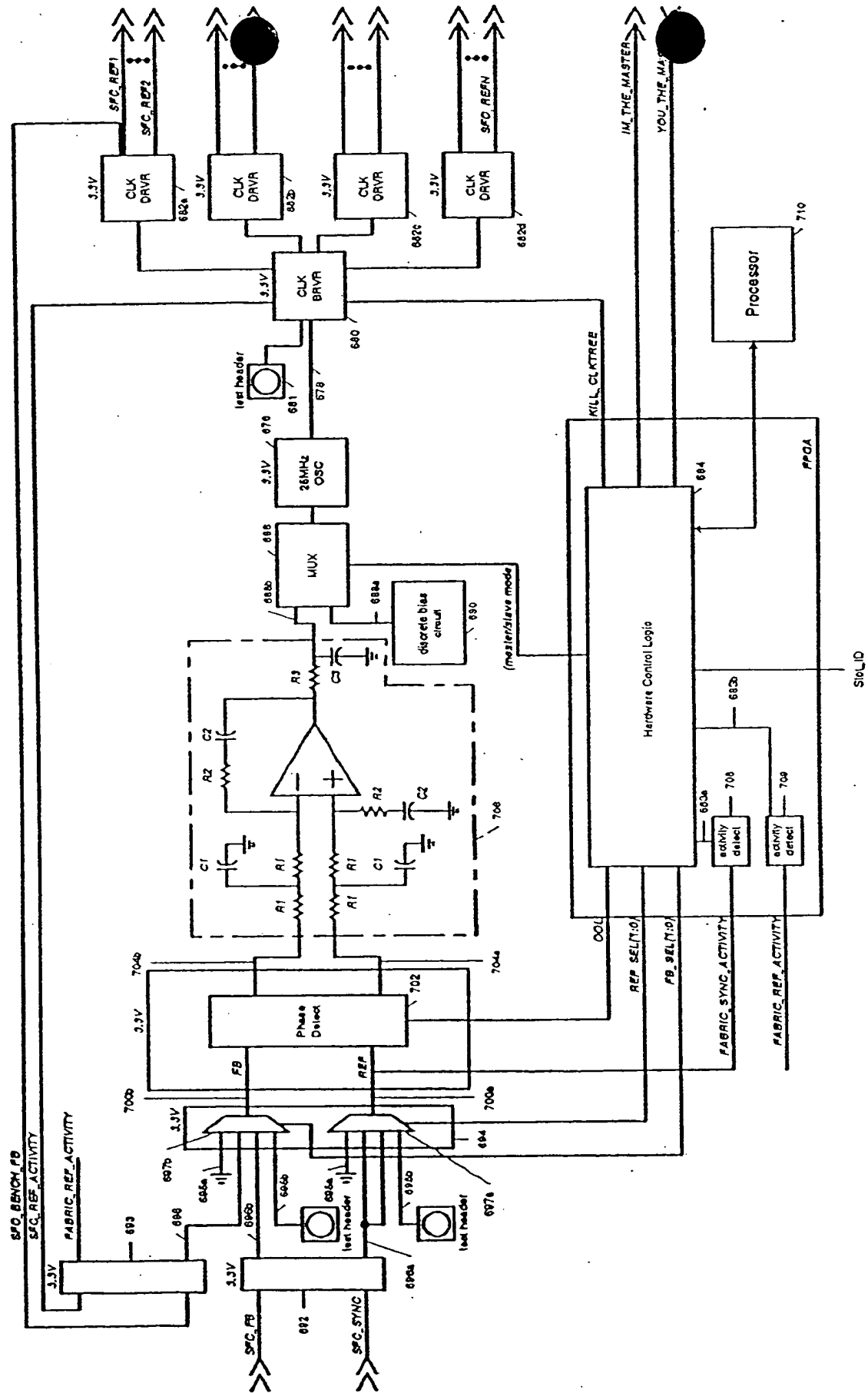


FIG. 44

FIG. 45



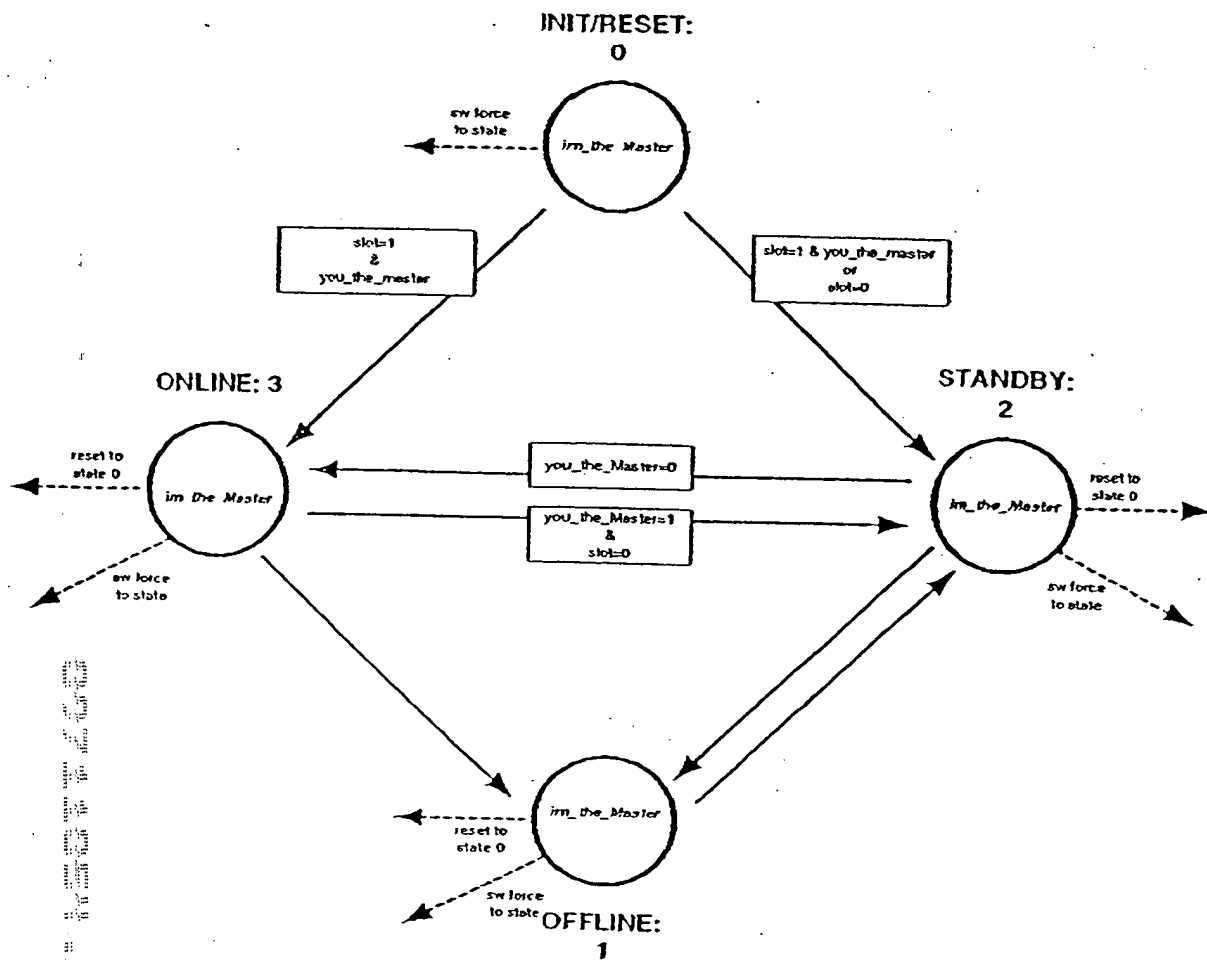
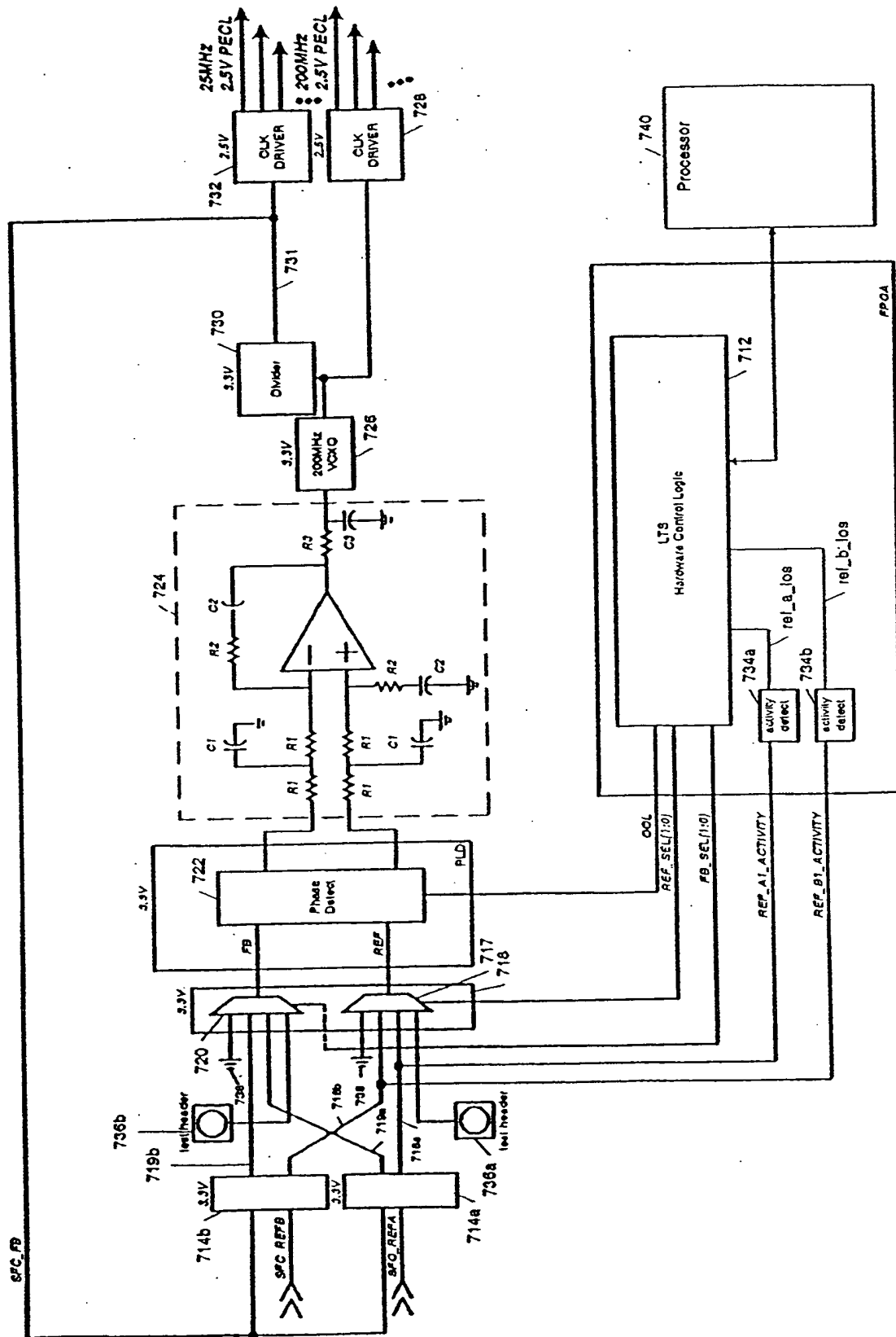


FIG. 46

FIG. 47



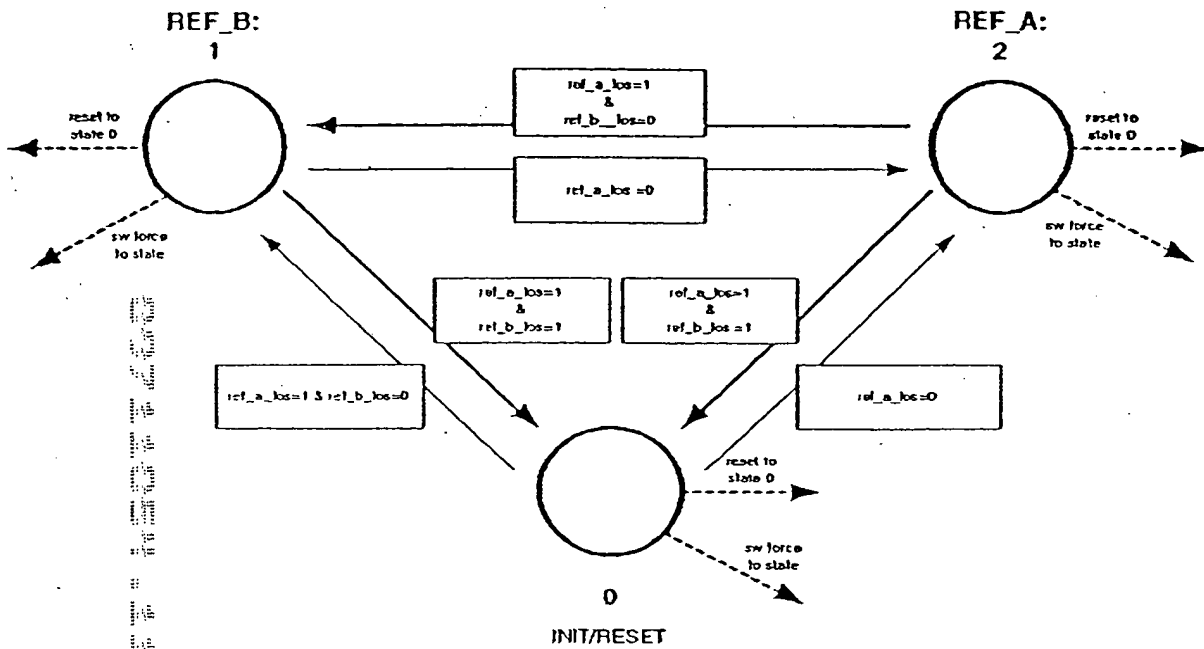


FIG. 48



340

Jul-6-00 4:27PM

781 795 2031

Sent By: Equipe Communications

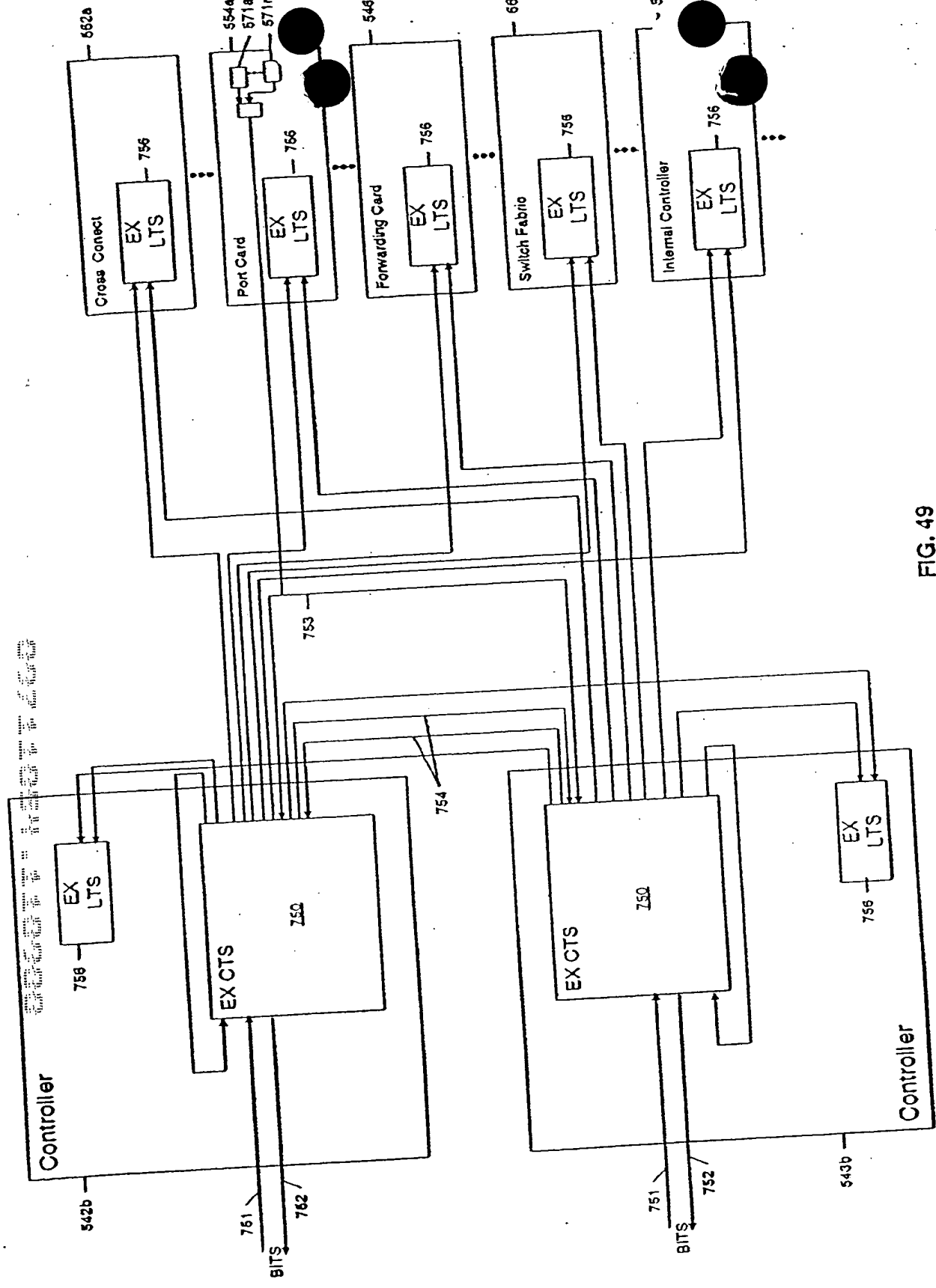
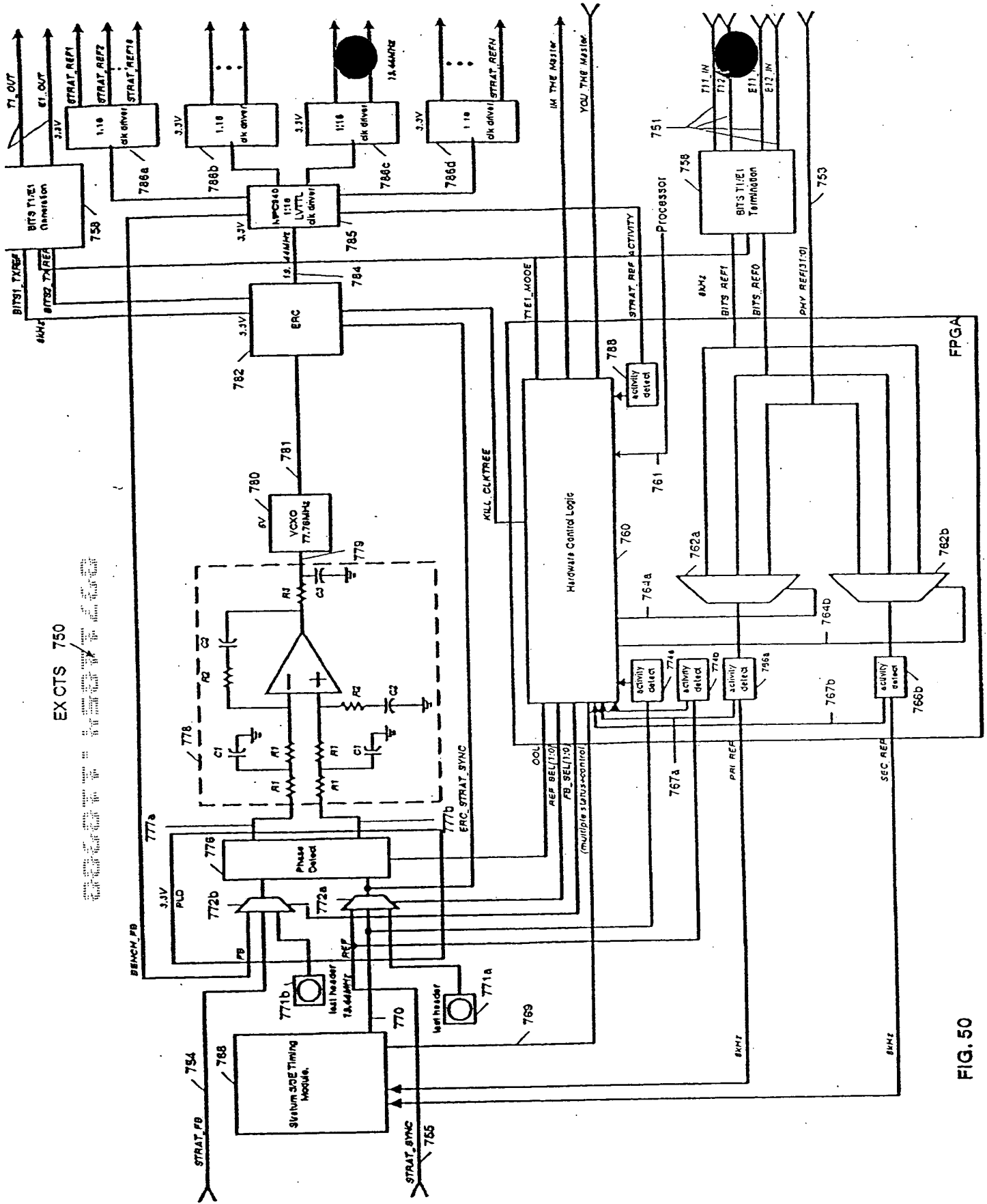
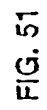


FIG. 49



**FIG. 50**



792

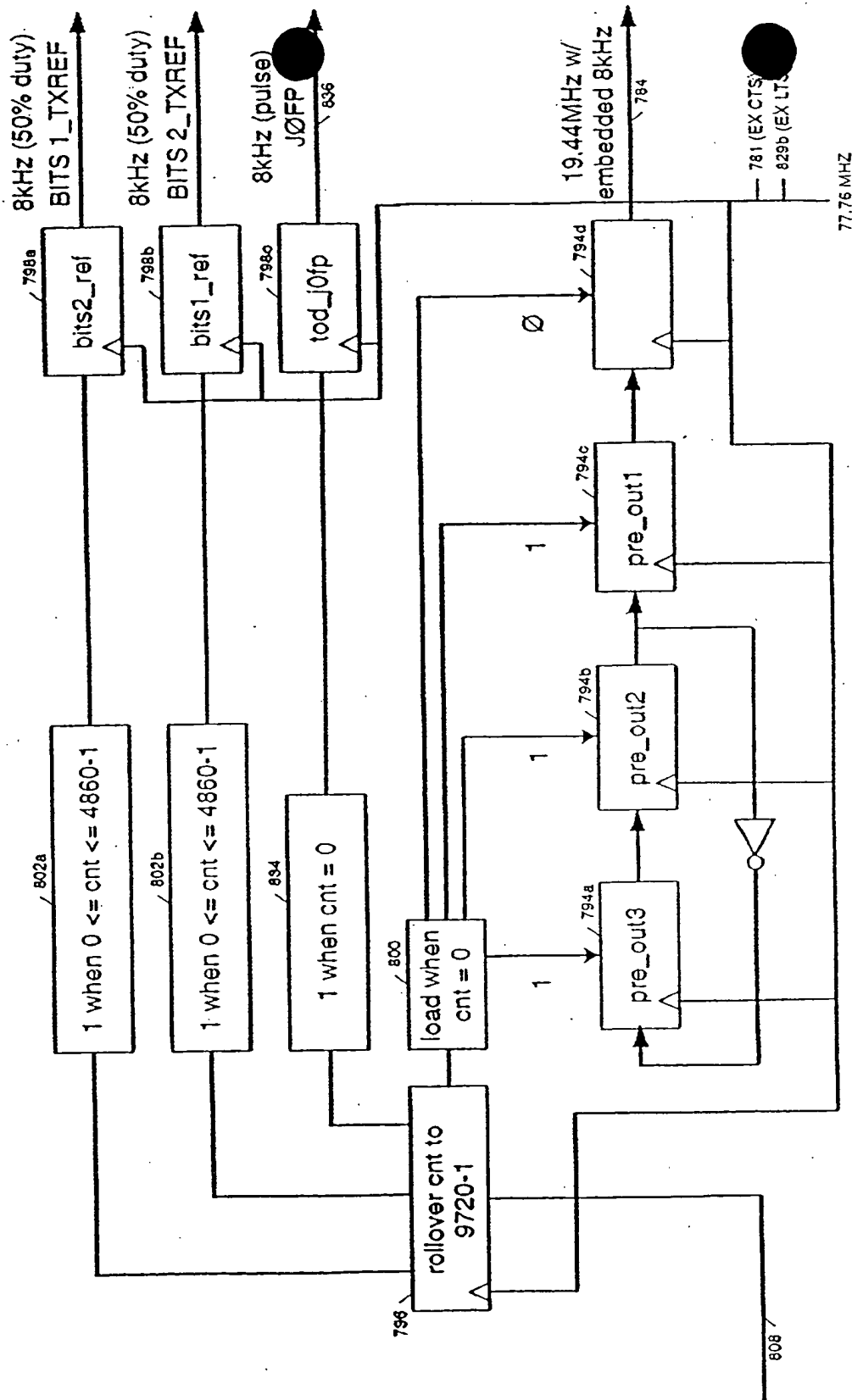
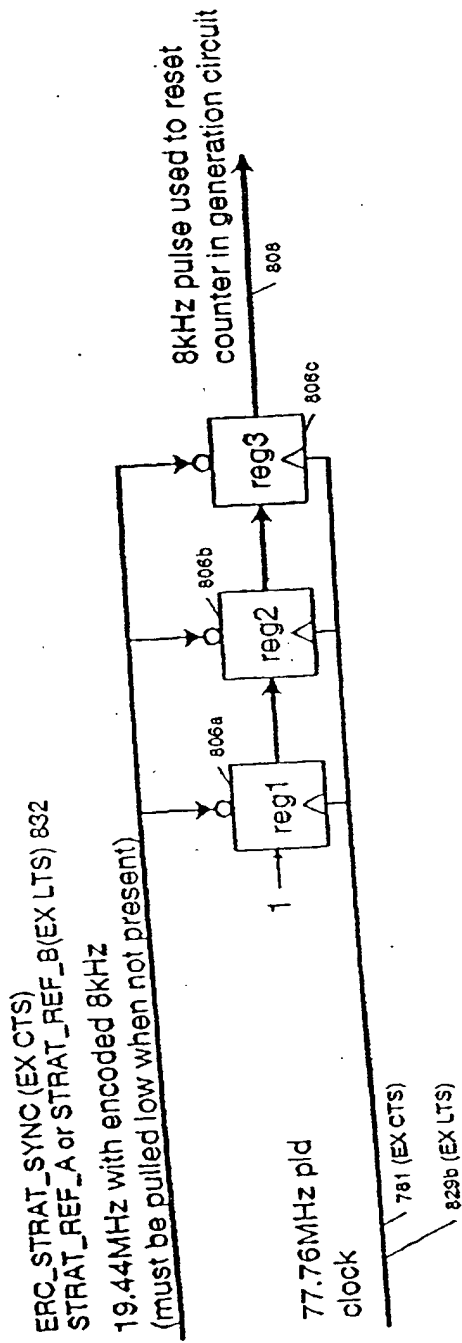


Fig. 52

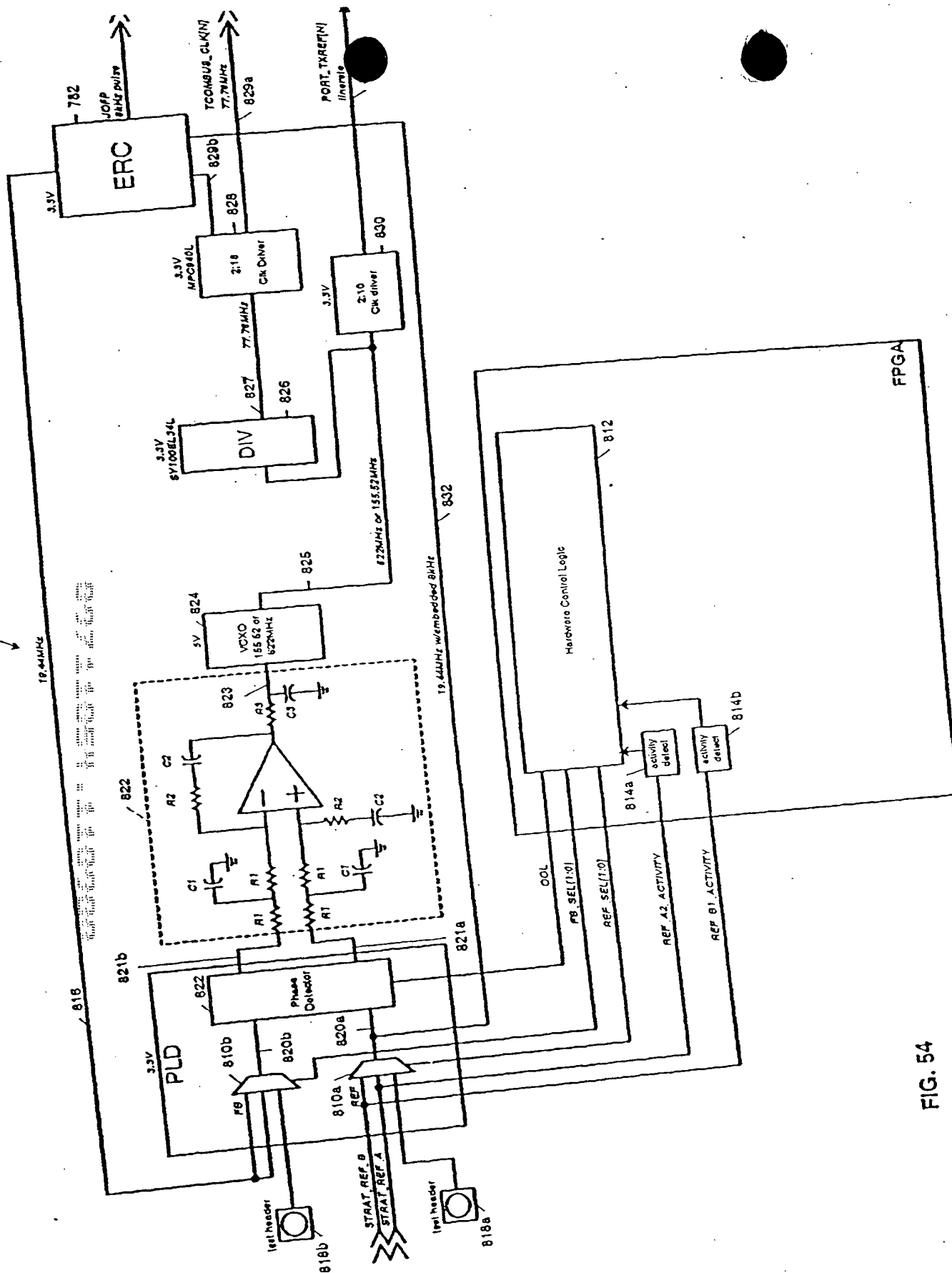
ERC\_STRAT\_SYNC (EX CTS)  
STRAT\_REF\_A or STRAT\_REF\_B (EX LTS) 832  
19.44MHz with encoded 8kHz  
(must be pulled low when not present)

804



Extractor

FIG. 53



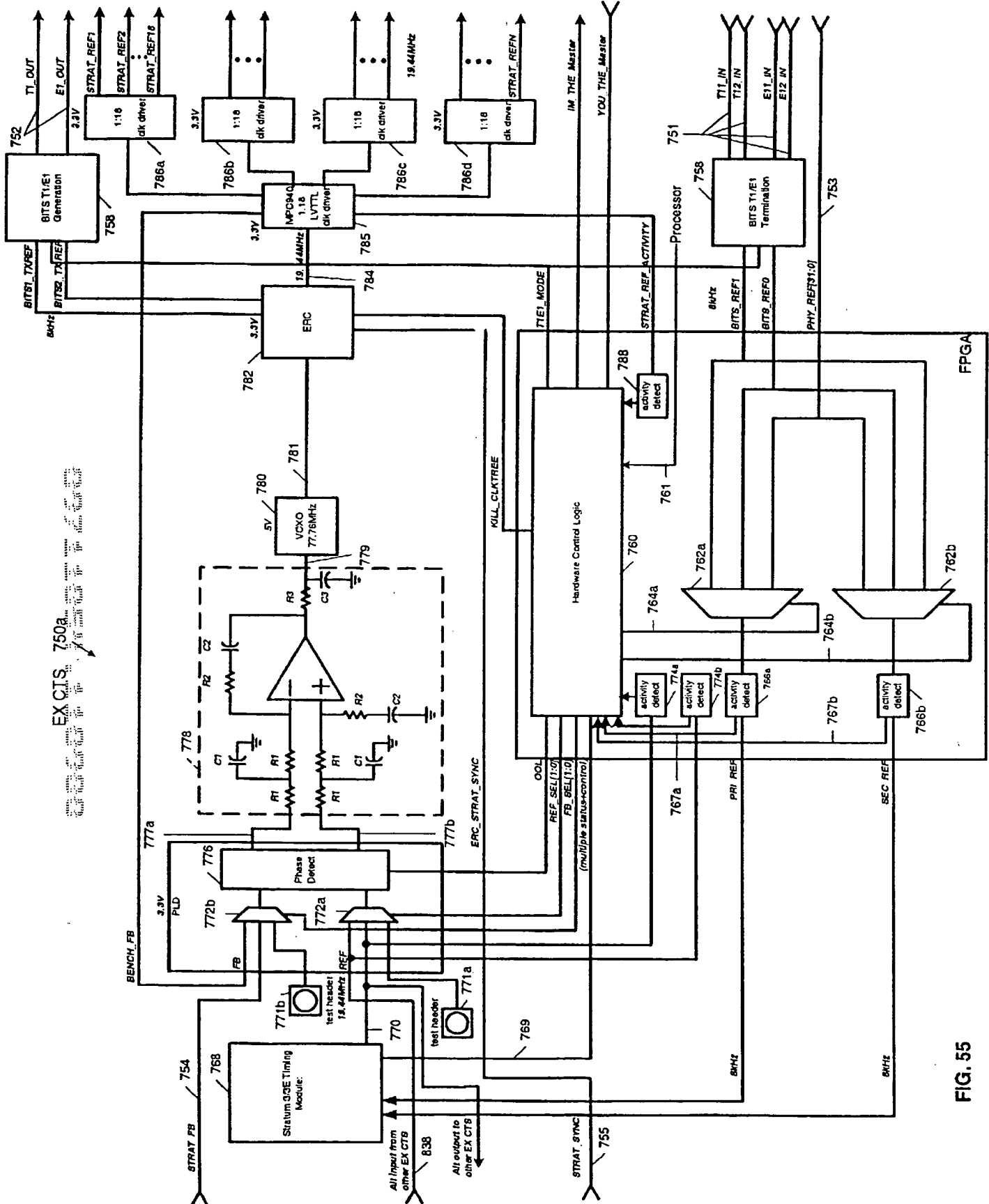


FIG. 55

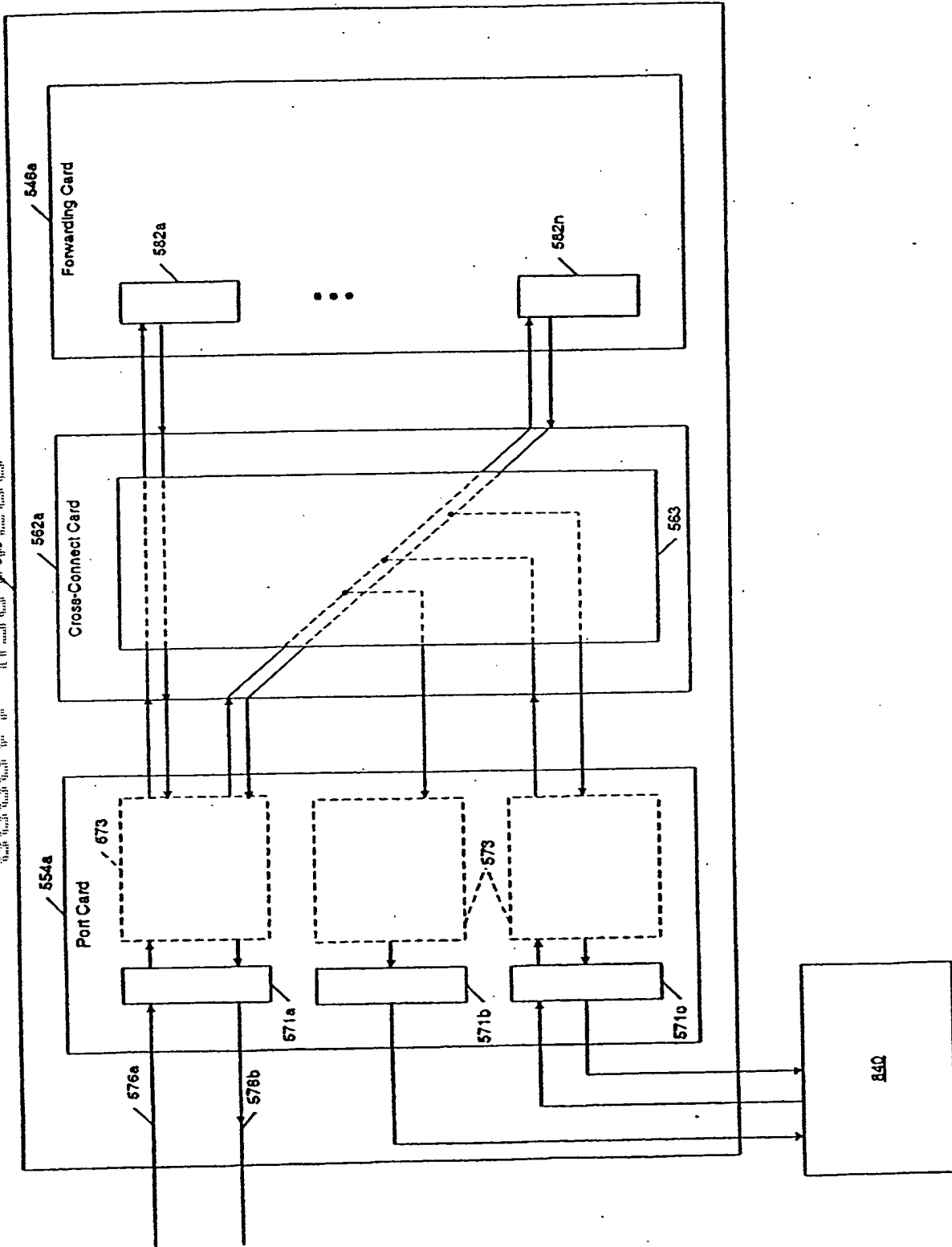


Fig. 56



FIG.57

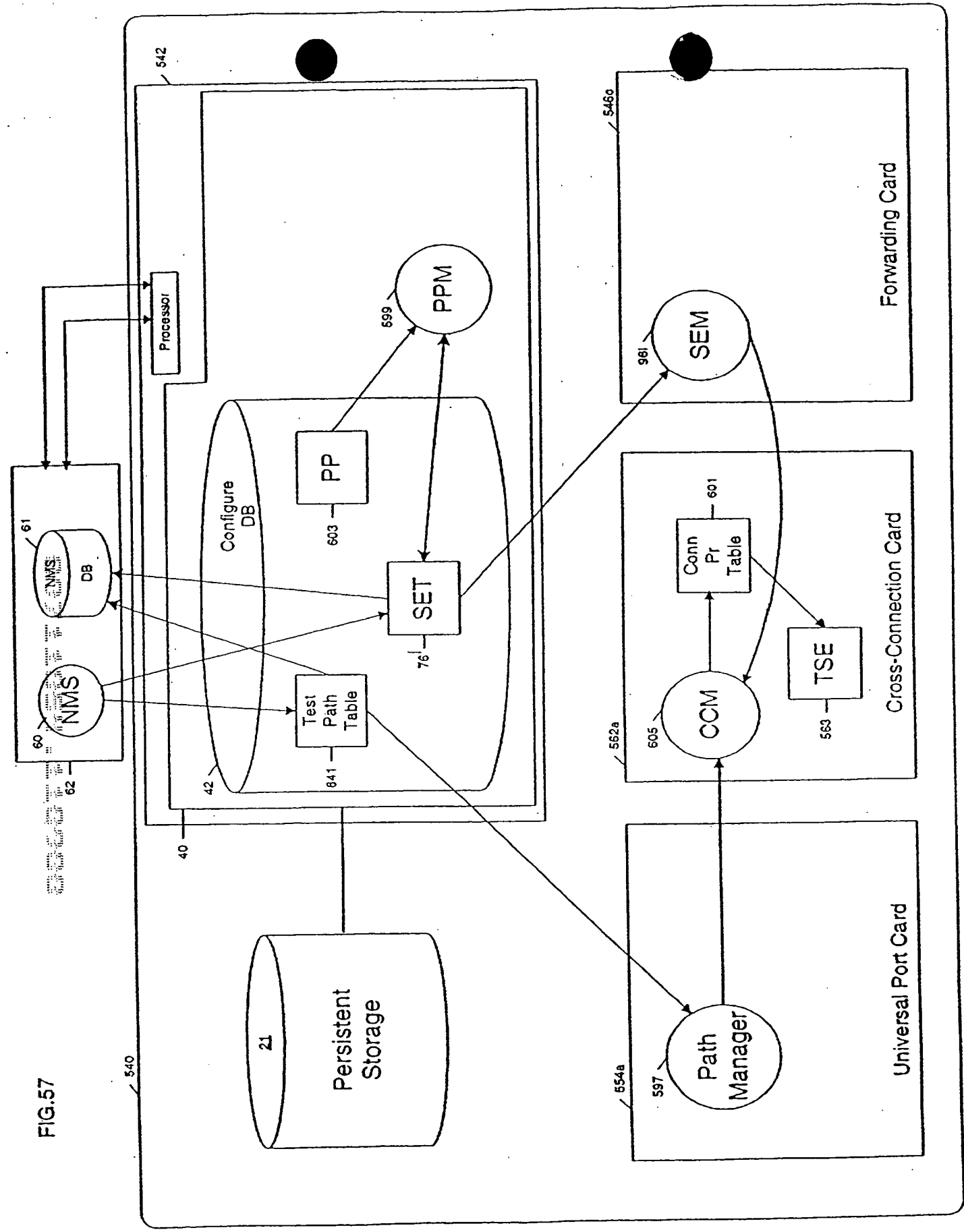


FIG. 58

Test Path Table 841

842	843	844	845	Path LID	UP Port LID	Time Slot	# of Time Slots	Monitor	Enable Port Receiver	...
				1666	1232	4	3	Ingress	No	
				1666	1233	4	3	Egress	No	
				1666	1233	4	3	Ingress	Yes	
				...	...	...	...			...
				...	...	...	...			...

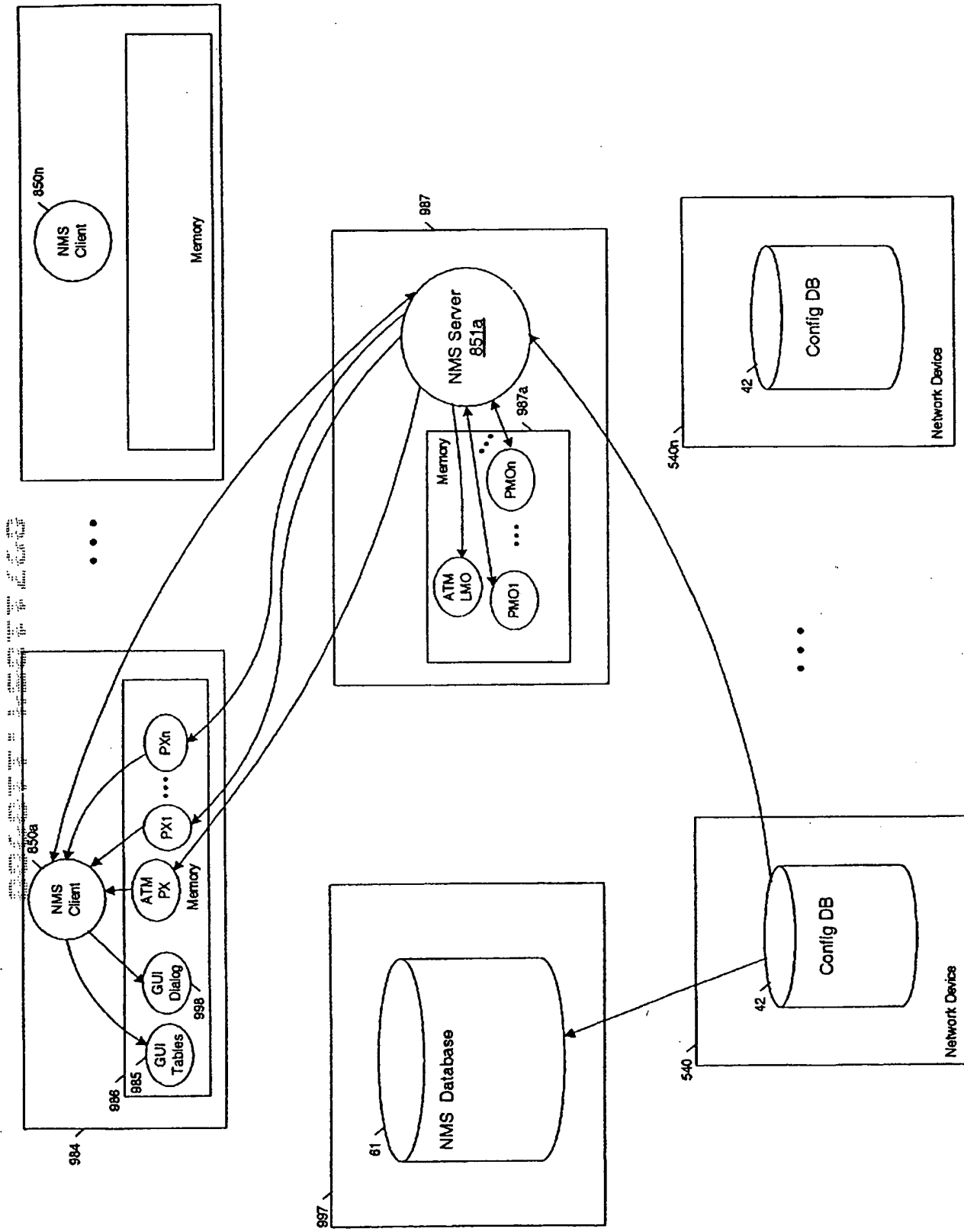


Fig. 59

Fig. 60a

Managed Device Table

PID	A1	...	An
1			

983b points to the first row. 983 points to the header row. 983a points to the first column.

Fig. 60b

Chassis Table

PID	A1	...	An	Managed Device PID
1				1
⋮	⋮	⋮	⋮	⋮

988b points to the first row. 988c points to the header row. 988 points to the last column. 988a points to the first column.

Fig. 60c

Shelf Table

PID	A1	...	An	Chassis PID
3				2
4				2
⋮	⋮	⋮	⋮	⋮
18				2

989a points to the first row. 989 points to the header row. 989b points to the last column.

Fig. 60d

Slot Table

PID	A1	...	An	Shelf PID
20				3
21				3
⋮	⋮	⋮	⋮	⋮
116				18

990a points to the first row. 990 points to the header row. 990b points to the last column. 990c points to the first column. 990d points to the last row.

CARD TABLE

47a		47b		47c
PID	CWD TYPE	VERSION NO.	SLOT PID	...
120	0XF002	3	20	
121	0XF002	4	21	
⋮	⋮	⋮	⋮	⋮
124	0X6002	1	24	
⋮	⋮	⋮	⋮	⋮
131	0XF002	1	31	
⋮	⋮	⋮	⋮	⋮

FIG. 60e

# PORT TABLE

49a	49b		49c
	PID	PORT TYPE	VERSION NO.
		CARD	PID
			...
300	00620	1	20
301	00620	1	20
302	00620	1	20
303	00620	1	20
304	00820	1	20
:	:	:	:
400	00620	1	39
:	:	:	:

FIG. 60f

FIG. 60g

FIG. 60g is a diagram of a SONET Path Table 600.

SONET Path Table 600

600a	Path LID	Port PID	Time Slot	# of Time Slots	...
901	304	4	3		
...	...	...	...	...	...

FIG. 60h

Service EndPoint Table 76"

76a	76c	76d	76e	76b		
SE LID	Q #	FC PID	FC Slice PID	FC Time Slot	Path LID	...
3000					901	
...	...	...	...	...	...	...



Fig. 60i

# ATM IF Table

114a ATM IF LID	ATM Group LID	114b SE LID	114" ...
5054		3000	...
⋮	⋮	⋮	...

Fig. 60j

### Virtual ATM IF Table

993a	LID	A1	...	An	ATM IF LID	993b
	7489				5054	993
	⋮	⋮	⋮	⋮	⋮	

Fig. 60k

### Virtual Connection Table

994a	LID	A1	...	An	Vir. ATM IF LID	994b
	⋮	⋮	⋮	⋮	⋮	994
	⋮	⋮	⋮	⋮	⋮	

Fig. 60L

### Virtual Link Table

995a	LID	A1	...	An	Vir. Conn. LID	Cross-Conn. LID	995b 995c 995
	⋮	⋮	⋮	⋮	⋮	⋮	
	⋮	⋮	⋮	⋮	⋮	⋮	

Fig. 60m

### Cross-Connect Table

996a	LID	A1	...	An	Vir. Link1 LID	Vir. Link2 LID	996b 996c 996
	⋮	⋮	⋮	⋮	⋮	⋮	
	⋮	⋮	⋮	⋮	⋮	⋮	

Fig. 61a

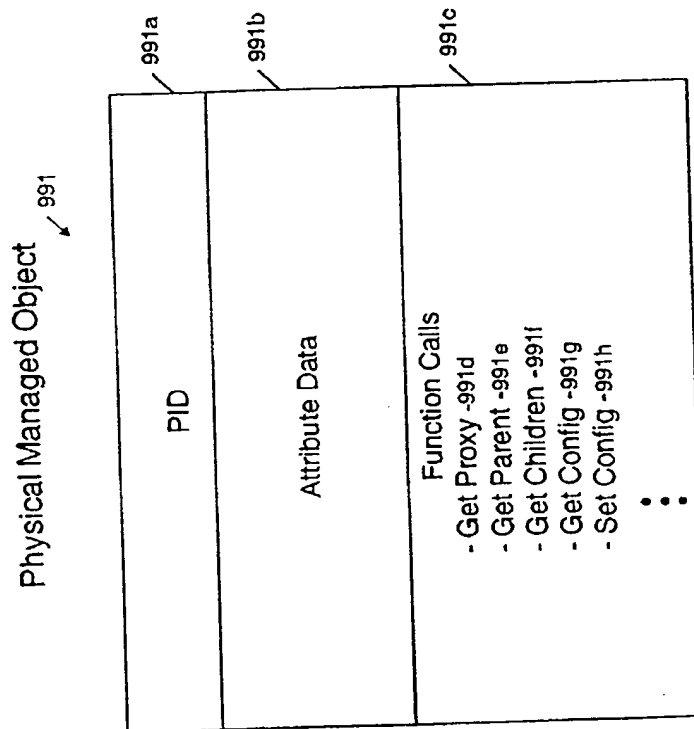
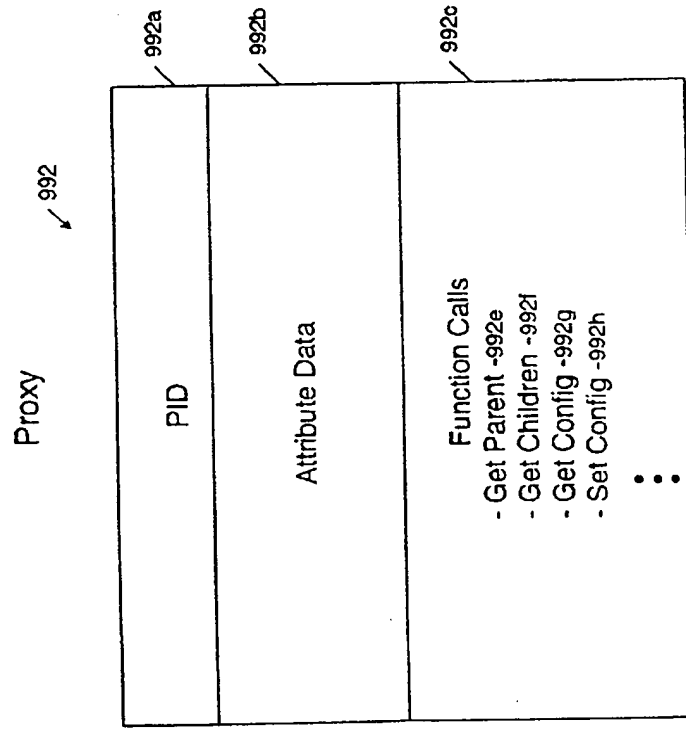


FIG. 61b is a block diagram of a proxy object 992. The proxy object 992 includes a PID field 992a, an attribute data field 992b, and a function calls field 992c. The function calls field 992c includes a list of function calls: - Get Parent -992e, - Get Children -992f, - Get Config -992g, - Set Config -992h, and a vertical ellipsis.

Fig. 61b



997a

Fig. 62

FIG. 63

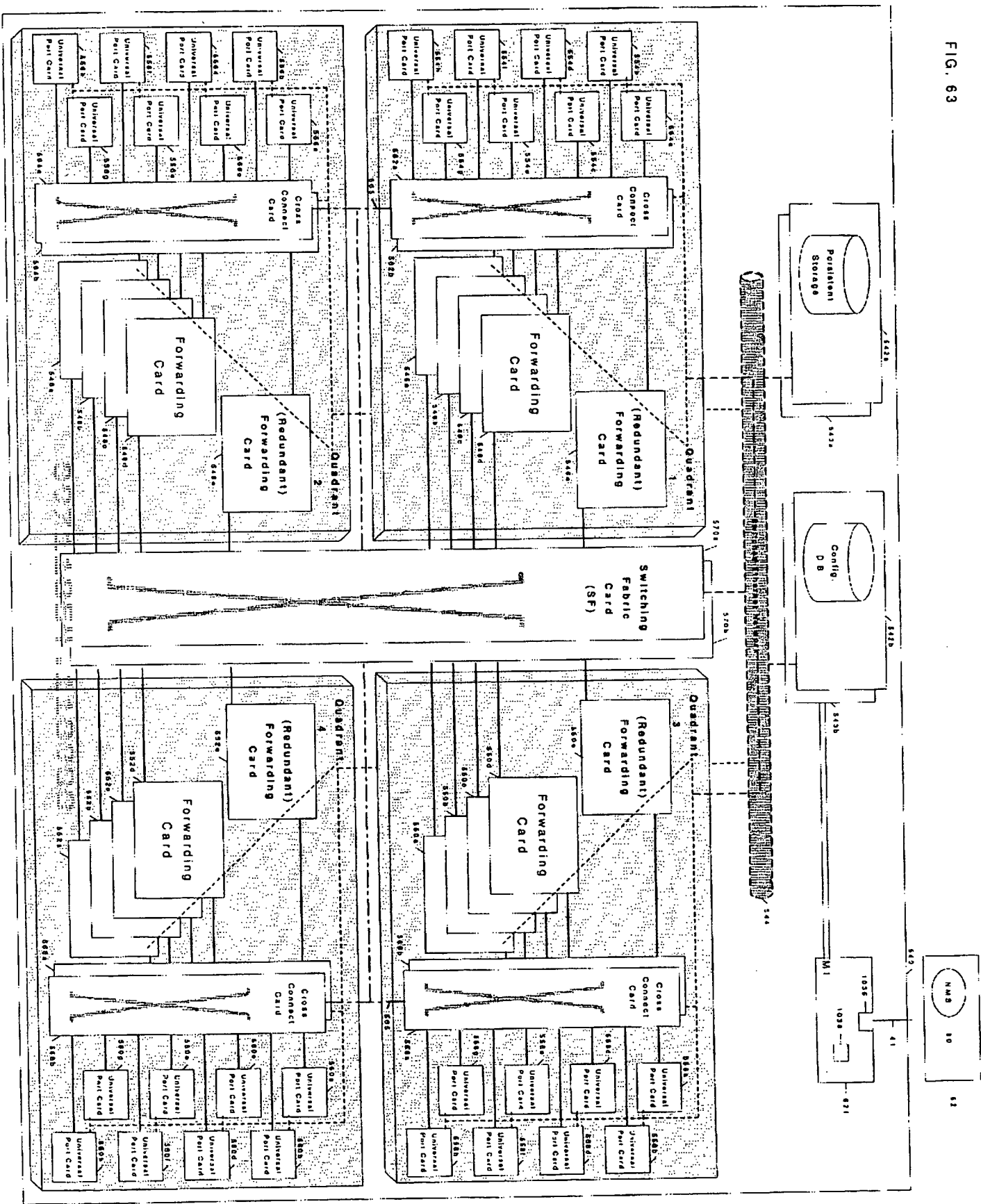


FIG. 64 is a diagram of an Administration Managed Device Table.

Fig. 64

Administration Managed Device Table

1014a

1014

1014e

1014f

LID	Host Address	Port Address	Retry	Timeout	Admin. Password	Prov. Password	Viewer Password	Physical ID	Physical ID
9046	192.168.9.202	1521			team 1	team 2	team 3		
:	:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:	:



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**APPLICANTS**

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James R. Perry, Merrimack, NH;

**\*\* CONTINUING DATA \*\*\*\*\***

THIS APPLICATION IS A CIP OF 09/703,856 11/01/2000  
WHICH IS A CIP OF 09/687,191 10/12/2000  
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WHICH IS A CIP OF 09/663,947 09/18/2000  
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WHICH IS A CIP OF 09/653,700 08/31/2000  
WHICH IS A CIP OF 09/637,800 08/11/2000  
WHICH IS A CIP OF 09/633,675 08/07/2000  
WHICH IS A CIP OF 09/625,101 07/24/2000  
WHICH IS A CIP OF 09/616,477 07/14/2000  
WHICH IS A CIP OF 09/613,940 07/11/2000  
WHICH IS A CIP OF 09/596,055 06/16/2000  
WHICH IS A CIP OF 09/593,034 06/13/2000  
WHICH IS A CIP OF 09/591,193 06/09/2000  
WHICH IS A CIP OF 09/588,398 06/06/2000  
WHICH IS A CIP OF 09/574,341 05/20/2000  
AND A CIP OF 09/574,343 05/20/2000  
AND SAID 09/593,034 06/13/2000  
IS A CIP OF 09/574,440 05/20/2000

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**GRANTED \*\* 05/18/2001**

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Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no	<b>STATE OR COUNTRY</b> MA	<b>SHEETS DRAWING</b> 202	<b>TOTAL CLAIMS</b> 29	<b>INDEPENDENT CLAIMS</b> 4
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance				
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021125

**TITLE**

Network device identity authentication



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